

## REVIEW – Supplemental Material

### A Systematic Mapping Study of Process Mining

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#### Appendix A. Complete list of primary studies

This appendix presents, in Table A1, the complete list of all the 705 primary studies selected to support the systematic literature mapping presented in this paper.

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Table A1.: Complete list of primary studies

Year	Type <sup>a</sup>	Source title (Acronym)	Author(s)	Paper title
2005	C	Int. Conf. on Business Process Management (BPM)	Gaaloul, W.; Godart, C.	Mining workflow recovery from event based logs
2005	C	Int. Conf. on Business Process Management (BPM)	Gombotz, R.; Dustdar, S.	On web services workflow mining
2005	C	Int. Conf. on Business Process Management (BPM)	Greco, G.; Guzzo, A.; Pontieri, L.	Mining hierarchies of models: From abstract views to concrete specifications
2005	C	Int. Conf. on Business Process Management (BPM)	Ly, L. T.; Rinderle, S.; Dadam, P.; Reichert, M.	Mining staff assignment rules from event-based data
2005	C	Int. Conf. on Business Process Management (BPM)	Medeiros, A. K. A.; Weijters, A. J. M. M.; van der Aalst, W. M. P.	Genetic process mining: A basic approach and its challenges
2005	C	Int. Conf. on Business Process Management (BPM)	Ruffolo, M.; Curia, R.; Gallucci, L.	Process management in health care: A system for preventing risks and medical errors
2005	C	Int. Conf. on Business Process Management (BPM)	Weber, B.; Reichert, M.; Rinderle, S.; Wild, W.	Towards a framework for the agile mining of business processes
2005	C	Int. Conf. on Cooperative Information Systems (CoopIS)	van der Aalst, W. M. P.; Beer, H. T.; van Dongen, B. F.	Process mining and verification of properties: An approach based on temporal logic
2005	C	Int. Conf. on Database and Expert Systems Applications (DEXA)	Gaaloul, W.; Bainia, K.; Godart, C.	Towards mining structural workflow patterns
2005	C	IEEE Int. Conf. on e-Business Engineering (ICEBEE)	Li, N.; Kang, J.; Lv, W.	A hybrid approach for dynamic business process mining based on reconfigurable nets and event types
2005	C	ACIS Int. Conf. on Computer and Information Science (ICIS)	Park, M.-J.; Kim, K.-H.; Kim, C.-M.	An efficient workcase classification method and tool in workflow mining
2005	C	Int. Conf. on Quality Software (ICQS)	Congiusta, A.; Greco, G.; Guzzo, A.; Manco, G.; Pontieri, L.; Saccà, D.; Talia, D.	A data mining-based framework for grid workflow management
2005	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	van der Aalst, W. M. P.; Medeiros, A. K. A.; Weijters, A. J. M. M.	Genetic process mining
2005	C	WS – Teamware: Supporting Scalable Virtual Teams in Multi-organizational Settings (SAINT WS)	Gaaloul, W.; Alaoui, S.; Bainia, K.; Godart, C.	Mining workflow patterns through event-data analysis
2005	C	ACM Int. Conf. on Knowledge Discovery and Data Mining (SIGKDD)	Silva, R.; Zhang, J.; Shanahan, J. G.	Probabilistic workflow mining
2005	C	Int. Conf. on Web Information Systems Engineering (WISE)	Dubouloz, B.; Toklu, C.	Discovering the most frequent patterns of executions in business processes described in BPEL
2005	J	Computer Supported Cooperative Work (CSCW)	van der Aalst, W. M. P.; Reijers, H. A.; Song, M.	Discovering social networks from event logs
2005	J	Data and Knowledge Engineering (DKE)	Dustdar, S.; Hoffmann, T.; van der Aalst, W. M. P.	Mining of ad-hoc business processes with TeamLog

<sup>a</sup> Legend: C – Conference; J – Journal

Continued on next page

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2005	J	Electronic Notes in Theoretical Computer Science (ENTCS)	van der Aalst, W. M. P.; Medeiros, A. K. A.	Process mining and security: Detecting anomalous process executions and checking process conformance
2005	J	Int. J. of Software Engineering and Knowledge Engineering (IJSEKE)	Nayak, R.; Qiu, T.	A data mining application: Analysis of problems occurring during A software project development process
2005	J	Requirements Engineering (RE)	van der Aalst, W. M. P.	Business alignment: Using process mining as a tool for Delta analysis and conformance testing
2005	J	IEEE Trans. on Knowledge and Data Engineering (TKDE)	Greco, G.; Guzzo, A.; Manco, G.; Saccà, D.	Mining and reasoning on workflows
2006	C	Annual Southeast Regional Conf. (ACMSE)	Rembert, A. J.	Comprehensive workflow mining
2006	C	IEEE Asia-Pacific Conf. on Services Computing (APSCC)	Wu, S.; Lai, C.; Sun, Y.	Applying data mining and petri net in reengineering of manufacturing information system
2006	C	Asia-Pacific Web Conf. (APWeb)	Wen, L.; Wang, J.; Sun, J.	Detecting implicit dependencies between tasks from event logs
2006	C	Int. Conf. on Business Information Systems (BIS)	Laegreid, T.; Sandal, P. C.; Ingvaldsen, J. E.; Gulla, J. A.	Using business process models to retrieve information from governing documents
2006	C	Int. Conf. on Business Process Management (BPM)	Bae, J.; Caverlee, J.; Liu, L.; Yan, H.	Process mining by measuring process block similarity
2006	C	Int. Conf. on Business Process Management (BPM)	Ellis, C. A.; Rembert, A. J.; Kim, K.-H.; Kindler, E.; Rubin, V.; Schafer, W.	Beyond workflow mining
2006	C	Int. Conf. on Business Process Management (BPM)	Thomas, O.; Adam, O.; Leyking, K.; Loos, P.; Wainer, J.	Process mining and petri net synthesis
2006	C	IEEE Int. Conf. on E-Commerce Technology / IEEE Int. Conf. on Enterprise Computing, E-Commerce and E-Services (CEC/EFF)	Thomas, O.; Adam, O.; Leyking, K.; Loos, P.	A fuzzy paradigm approach for business process intelligence
2006	C	Int. Conf. on Cooperative Information Systems (CoopIS)	Gunther, C. W.; Rinderle, S.; Reichert, M.; van der Aalst, W. M. P.	Change mining in adaptive process management systems
2006	C	Int. Conf. on Cooperative Information Systems (CoopIS)	Rouached, M.; Gaaloul, W.; van der Aalst, W. M. P.; Bhiri, S.; Godart, C.	Web service mining and verification of properties: An approach based on event calculus
2006	C	IEEE Int. Conf. on Computer Supported Cooperative Work in Design (CSCWD)	Van, L.; Yuqiang, F.	Design of an automatic workflow modeling method in cooperative WfMS
2006	C	Int. WS on Data Engineering Issues in E-Commerce and Services (DEECS)	Gaaloul, W.; Bainia, K.; Godart, C.	A bottom-up workflow mining approach for workflow applications analysis
2006	C	Int. WS on Database and Expert Systems Applications (DEXA)	Curia, R.; Gallucci, L.; Ruffolo, M.	Knowledge management in health care: An architectural framework for clinical process management systems
2006	C	Eur. WS on Inductive Databases and Constraint Based Mining (EWIDCBM)	Greco, G.; Guzzo, A.; Manco, G.; Pontieri, L.; Saccà, D.	Mining constrained graphs: The case of workflow systems
2006	C	WS on Foundations and New Directions of Data Mining (FNDDM)	Kim, K.-H.; Ellis, C. A.	Workflow reduction for reachable-path rediscovery in workflow mining
2006	C	Int. Conf. on Computational Science and Its Applications (ICCSA)	Jung, J.-Y.; Bae, J.	Workflow clustering method based on process similarity

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2006	C	IEEE Int. Conf. on e-Business Engineering (ICEBEE)	Liang, Q. A.; Chung, J.-Y.; Miller, S.; Ouyang, Y.	Service pattern discovery of web service mining in Web service registry-repository
2006	C	IEEE Int. Conf. on e-Business Engineering (ICEBEE)	Tian, F.; Xing, K.; Li, R.	Workflow analysis based on estimate of fuzzy and statistical data
2006	C	Int. Conf. on Machine Learning and Cybernetics (ICMLC)	Li, Y.; Feng, Y.-Q.	An automatic business process modeling method based on Markov matrix
2006	C	IEEE Int. Conf. on Web Services (ICWS)	Bae, J.; Liu, L.; Caverlee, J.; Rouse, W. B.	Process mining, discovery, and integration using distance measures
2006	C	German Conf. on Multiagent System Technologies (MATES)	Cabac, L.; Knaak, N.; Moldt, D.; Rolke, H.	Analysis of multi-agent interactions with process mining techniques
2006	C	Int. Software Process WS (SPW)	Kindler, E.; Rubin, V.; Schafer, W.	Incremental workflow mining based on document versioning information
2006	J	Data and Knowledge Engineering (DKE)	Vullers, M. H. J.; van der Aalst, W. M. P.; Rosemann, M.	Mining configurable enterprise information systems
2006	J	Data Mining and Knowledge Discovery (DMKD)	Maruster, L.; Weijters, A. J. M. M.; van der Aalst, W. M. P.; van den Bosch, A.	A rule-based approach for process discovery: Dealing with noise and imbalance in process logs
2006	J	Decision Support Systems (DSS)	van der Aalst, W. M. P.	Matching observed behavior and modeled behavior: An approach based on Petri nets and integer programming
2006	J	Expert Systems with Applications (ESWA)	Yang, W.-S.; Hwang, S.-Y.	A process-mining framework for the detection of healthcare fraud and abuse
2006	J	IEEE Internet Computing (IC)	Cheung, W. K.; Zhang, X.-F.; Wong, H.-F.; Liu, J.; Luo, Z.-W.; Tong, F. C. H.	Service-oriented distributed data mining
2006	J	Int. J. of Advanced Manufacturing Technology (IJAMT)	Ho, G. T. S.; Lau, H. C. W.; Lee, C. K. M.; Ip, A. W. H.; Pun, K. F.	An intelligent production workflow mining system for continual quality enhancement
2006	J	Int. J. of Business Intelligence and Data Mining (IJBIDM)	Cardoso, J.; Lenic, M.	Web process and workflow path mining using the Multimethod approach
2006	J	Int. J. of Business Process Integration and Management (IJBPM)	Dustdar, S.; Gombotz, R.	Discovering web service workflows using web services interaction mining
2006	J	Int. J. of Services, Technology and Management (IJSTM)	Lau, H. C. W.; Ho, G. T. S.; Kwok, S. K.; Lee, C. K. M.; Ho, W.	Development of a responsive logistics workflow system: An OLAP-based hybrid approach
2006	J	J. of Computer Science and Technology (JCST)	Huang, X.-Q.; Wang, L.-F.; Zhao, W.; Zhang, S.-K.; Yuan, C.-Y.	A workflow process mining algorithm based on synchro-net
2006	J	Information Systems Management (JISM)	Ingvaldsen, J. E.; Gulla, J. A.	Model-based business process mining
2006	J	Information Visualization (JV)	Hao, M. C.; Keim, D. A.; Dayal, U.; Schneidewind, J.	Business process impact visualization and anomaly detection
2006	J	J. of Mechanical Science and Technology (JMST)	Zhou, F.; Bo, R.-F.; Huang, H.-Z.; Ling, D.; Miao, Q.	Hierarchical colored petri nets based components for workflow systems
2006	J	IEEE Trans. on Knowledge and Data Engineering (TKDE)	Greco, G.; Guzzo, A.; Pontieri, L.; Saccà, D.	Discovering expressive process models by clustering log traces

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2007	C	National Conf. on Artificial Intelligence	Chun, A. H. W.	Using AI for e-Government automatic assessment of immigration application forms
2007	C	Joint Asia-Pacific Web Conf. on Advances in Data and Web Management / Int. Conf. on Web-Age Information Management (AP-Web/WAIM)	Wen, L.; Wang, J.; Sun, J.	Mining invisible tasks from event logs
2007	C	Int. WS on Business Intelligence for the Real-Time Enterprises (BIRTE)	Podorozhny, R.; Ngu, A.; Georgakopoulos, D.	Business process learning for real time enterprises
2007	C	Int. Conf. on Business Process Management (BPM)	Ferreira, D. R.; Zacarias, M.; Malheiros, M.; Ferreira, P.	Approaching process mining with sequence clustering: Experiments and findings
2007	C	Int. Conf. on Business Process Management (BPM)	Gunther, C. W.; van der Aalst, W. M. P.	Fuzzy mining – Adaptive process simplification based on multi-perspective metrics
2007	C	Int. Conf. on Business Process Management (BPM)	Lamma, E.; Mello, P.; Montali, M.; Riguzzi, F.; Storari, S.	Inducing declarative logic-based models from labeled traces
2007	C	Int. Conf. on Business Process Management (BPM)	Reijers, H. A.; Song, M.; Jeong, B.	On the performance of workflow processes with distributed actors: Does place matter?
2007	C	Int. Conf. on Cooperative Design, Visualization, and Engineering (CDVE)	Zhen, L.; Jiang, Z.; Liu, C.; Liang, J.	Capturing designers' knowledge demands in collaborative team
2007	C	IEEE Cong. on Evolutionary Computation (CEC)	Turner, C. J.; Tiwari, A.	An experimental evaluation of feedback loops in a business process mining genetic algorithm
2007	C	Int. WS on Domain Driven Data Mining (DDDM)	Peng, W.; Sun, T.; Rose, P.; Li, T.	A semi-automatic system with an iterative learning method for discovering the leading indicators in business processes
2007	C	Int. WS on Data Management and Information System (DMIS)	Xie, Y.-W.; Li, X.-W.; Chen, Y.	The research on the usage of business process mining in the implementation of BPR
2007	C	Int. Conf. on Conceptual Modeling (ER)	Gaaloul, W.; Bhiri, S.; Haller, A.	Mining and re-engineering transactional workflows for reliable executions
2007	C	Int. Conf. on Fuzzy Systems and Knowledge Discovery (FSKD)	Wang, Y.; Li, M.; Cao, J.; Lin, X.; Tang, F.	Workflow similarity measure for process clustering in grid
2007	C	Int. Conf. on Grid and Cooperative Computing (GCC)	Jin, T.; Wang, J.; Wen, L.	Organizational modeling from event logs
2007	C	Int. Conf. on Computer and Information Technology (ICCIT)	Chowdhury, M. A.; Chowdhury, M.; Chowdhury, A. A.; Rafique, S.	An inter organization communication architecture model for real time activity base online transmission to increase the work process efficiency of container terminal
2007	C	Int. Conf. on Data Engineering (ICDE)	Nurminen, M.; Honkkantha, A.; Karkkainen, T.	ProcMiner: Advancing process analysis and management
2007	C	Int. Conf. on Digital Information Management (ICDIM)	Elghazel, H.; Deslandres, V.; Kallel, K.; Duschauchy, A.	Clinical pathway analysis using graph-based approach and Markov models
2007	C	Int. Conf. on Intelligent and Advanced Systems (ICIAS)	Sathyananayana, M. V.; Kavya, N. P.; Naveen, N. C.	Intelligent mining for capturing processes through event logs to represent workflows using FP tree

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2007	C	Int. Conf. on Machine Learning and Cybernetics (ICMLC)	Li, X.-Y.; Yuan, J.-S.; Kong, Y.-H.	Mining association rules from XML data with index table
2007	C	Int. Conf. on Software Process (ICSP)	Rubin, V.; Gunther, C. W.; van der Aalst, W. M. P.; Kindler, E.; van Dongen, B. F.; Schafer, W.	Process mining framework for software processes
2007	C	Int. Conf. on Software Process (ICSP)	Zhu, L.; Jeffery, R.; Staples, M.; Huo, M.; Tran, T. T.	Effects of architecture and technical development process on micro-process
2007	C	IEEE Int. Conf. on Industrial Informatics (INDIN)	Tsang, K. F.; Lau, H. C.; Kwok, S.	Development of a distributed process mining system for reactivation etching enhancement
2007	C	IEEE Int. Conf. on Industrial Informatics (INDIN)	Zhang, N.; Lu, W. F.	A framework for managing enterprise knowledge for collaborative decision support
2007	C	Int. Symp. on Data, Privacy, and E-Commerce (ISDPE)	Xing, J.; Li, Z.; Cheng, Y.; Yin, F.; Li, B.; Chen, L.	Mining process models from event logs in distributed bioinformatics workflows
2007	C	World Cong. on Health (Medical) Informatics (MEDINFO)	Lang, M.; Kirpekar, N.; Burkle, T.; Laumann, S.; Prokosch, H.-U.	Results from Data Mining in a Radiology Department: The Reliability of Data Quality
2007	C	Int. WS on Process Aware Information Systems (PAIS)	Li, J.; Liu, D. Y.; Yang, B.	Process Mining: Extending alpha-Algorithm to Mine Duplicate Tasks in Process Logs
2007	C	Pacific-Asia Conf. on Advances in Knowledge Discovery and Data Mining (PAKDD)	Cao, L.; Zhao, Y.; Figueiredo, F.; Ou, Y.; Luo, D.	Mining high impact exceptional behavior patterns
2007	C	Pacific-Asia Conf. on Advances in Knowledge Discovery and Data Mining (PAKDD)	Huang, X.; Zhong, H.; Cai, W.	SepPMa: An algorithm that mining sequential processes from hybrid log
2007	C	Pacific-Asia Conf. on Advances in Knowledge Discovery and Data Mining (PAKDD)	Kim, K.; Ellis, C. A.	sigma-algorithm: Structured workflow process mining through amalgamating temporal workcases
2007	C	Pacific-Asia Conf. on Advances in Knowledge Discovery and Data Mining (PAKDD)	Kwanghoon, K.; Ellis, C. A.	?-Algorithm: Structured workflow process mining through amalgamating temporal workcases
2007	C	Pacific-Asia Conf. on Advances in Knowledge Discovery and Data Mining (PAKDD)	Weixiang, S.; Tao, L.; Wei, P.; Tong, S.	Incremental workflow mining with optional patterns
2007	C	IEEE Int. Conf. on Systems, Man and Cybernetics (SMC)	Medeiros, A. K. A.; Pedrinaci, C.; van der Aalst, W. M. P.; Domingue, J.; Song, M.; Rozimat, A.; Norton, B.; Cabral, L.	An outlook on Semantic business process mining and monitoring
2007	C	IFIP Int. WS on Semantic Web and Web Semantics (SWS)	Busi, N.; Pinna, G. M.	Characterizing workflow nets using regions
2007	C	Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)	van Beest, N. R. T. P.; Maruster, L.	A process mining approach to redesign business processes – A case study in gas industry
2007	C	Int. Symp. on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)	Gonczy, L.; Heckel, R.; Varro, D.	Model-based testing of service infrastructure components
2007	C	IFIP Int. Conf. on Testing of Communicating Systems / Int. WS on Formal Approaches to Testing Software (Testcom/FATES)	Zhao, W.; Ye, M.	A workflow frequent pattern mining algorithm
2007	C	Int. Conf. on Wireless Communications, Networking and Mobile Computing (WiCOM)		

<sup>a</sup> Legend: C – Conference; J – Journal

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Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2007	J	Advanced Engineering Informatics (AEI) Computers in Industry (CI)	van der Aalst, W. M. P.; van Dongen, B. F.; Vullers, M. H. J.; Verbeek, H. M. W.; van der Aalst, W. M. P.; Dustdar, S.; Hoffmann, T.	Exploring the CSCW spectrum using process mining Verification of the SAP reference models using EPC reduction, state-space analysis, and invariants Interaction pattern detection in process oriented information systems
2007	J	Data and Knowledge Engineering (DKE)	Medeiros, A. K. A.; Weijters, A. J. M. M.; van der Aalst, W. M. P.	Genetic process mining: An experimental evaluation
2007	J	Data Mining and Knowledge Discovery (DMKD)	Wen, L.; van der Aalst, W. M. P.; Wang, J.; Sun, J.	Mining process models with non-free-choice constructs
2007	J	Data Mining and Knowledge Discovery (DMKD)	Perez, M. S.; Sanchez, A.; Robles, V.; Herrero, P.; Pena, J. M.	Design and implementation of a data mining grid-aware architecture
2007	J	Future Generation Computer Systems (FGCS)	Greco, G.; Guzzo, A.; Pontieri, L.	An information-theoretic framework for process structure and data mining
2007	J	Int. J. of Data Warehousing and Mining (IJDWM)	Hu, J.; Zhong, N.; Shi, Y.	Developing mining-grid centric E-finance portals for risk management and decision making
2007	J	Int. J. of Pattern Recognition and Artificial Intelligence (IIPRAI)	Bae, J.; Liu, L.; Caverlee, J.; Zhang, L.-J.; Bae, H.	Development of distance measures for process mining, discovery, and integration
2007	J	Int. J. of Web Services Research (IJWSR)	Greco, G.; Guzzo, A.; Manco, G.; Saccà, D.	Mining unconnected patterns in workflows
2007	J	Information Systems (JIS)	van der Aalst, W. M. P.; Reijers, H. A.; Weijters, A. J. M. M.; van Dongen, B. F.; Medeiros, A. K. A.; Song, M.; Verbeek, H. M. W.	Business process mining: An industrial application
2007	J	Information Systems (JIS)	Mans, R. S.; Schonenberg, M. H.; Song, M.; van der Aalst, W. M. P.; Bakker, P. J. M.; Carmona, J.; Cortadella, J.; Kishinevsky, M.	Application of process mining in healthcare – A case study in a Dutch Hospital
2008	C	Int. Joint Conf. on Biomedical Engineering Systems and Technologies (BIOSTEC)	Diniz, P. C.; Ferreira, D. R.	A region-based algorithm for discovering Petri nets from event logs
2008	C	Int. Conf. on Business Process Management (BPM)	Goedertier, S.; Martens, D.; Baesens, B.; Haesen, R.; Vanthienen, J.	Automatic extraction of process control flow from I/O operations
2008	C	Int. Conf. on Business Process Management (BPM)	Ingvaldsen, J. E.; Gulla, J. A.	Process mining as first-order classification learning on logs with negative events
2008	C	Int. Conf. on Business Process Management (BPM)	Medeiros, A. K. A.; Guzzo, A.; Greco, G.; van der Aalst, W. M. P.; Weijters, A. J. M. M.; van Dongen, B. F.; Saccà, D.	Preprocessing support for large scale process mining of SAP transactions
2008	C	Int. Symp. on Distributed Computing and Applications to Business Engineering and Science (DCABES)	Kong, L. D.; Zhang, H.; Kong, L. F.	Process mining based on clustering: A quest for precision
2008	C	Workflow Management Architecture Based on Data Mining		Workflow Management Architecture Based on Data Mining

<sup>a</sup> Legend: C – Conference; J – Journal

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Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2008	C	Int. Conf. on Database and Expert Systems Applications (DEXA )	Turi, A.; Appice, A.; Ceci, M.; Malerba, D.	A grid-based multi-relational approach to process mining
2008	C	Eur. Conf. on Information Systems (ECIS)	Medeiros, A. K. A.; Karla, A.; van der Aalst, W. M. P.; Pedrinaci, C.	Semantic process mining tools: Core building blocks
2008	C	IFAC/IIFIP WS on Enterprise Integration, Interoperability and Networking (E12N)	Gottschalk, F.; van der Aalst, W. M. P.; Vullers, M. H. J.	Mining Reference Process Models and Their Configurations
2008	C	Int. Conf. on Fuzzy Systems and Knowledge Discovery (FSKD)	Zhang, L.; Wang, H.	A block-structured mining approach to support process discovery
2008	C	Conf. on Genetic and Evolutionary Computation (GECCO)	Turner, C. J.; Tiwari, A.; Mehnen, J.	A genetic programming approach to business process mining
2008	C	Int. Conf. on Computational Science and Its Applications (ICCSA)	Misev, A.; Atanassov, E.	Performance analysis of GRID middleware using process mining
2008	C	IEEE Int. Conf. on Data Mining (ICDM)	Clufudgeon, C.; Filote, C.; Amarandei, D.	Control charts of workflows
2008	C	Int. Conf. on Enterprise Information Systems (ICEIS)	Folino, F.; Greco, G.; Guzzo, A.; Pontieri, L.	Discovering multi-perspective process models
2008	C	Int. Conf. on Enterprise Information Systems (ICEIS)	Nikovski, D., Baba, A.	Workflow trees for representation and mining of implicitly concurrent business processes
2008	C	Int. Conf. on Innovative Computing Information and Control (ICICIC)	Liqun, Z.; Haiyang, W.	A block-structured mining approach from audit logs
2008	C	Int. Conf. on Intelligent Computation Technology and Automation (ICICTA)	Li, Y.; Deng, S.-L.	Design of intelligent business process system and process remodeling
2008	C	Int. Conf. on Machine Learning and Cybernetics (ICMLC)	Gu, C.-Q.; Chang, H.; Yi, Y.	Workflow mining: Extending the ?-algorithm to mine duplicate tasks
2008	C	Int. Conf. on Logistics Engineering and Supply Chain (ICSCLE)	Deng, Z. H.; Sun, L. M.	Business Processes Reengineering Based on Data Mining
2008	C	IEEE Int. Conf. on Web Services (ICWS)	Li, C.; Reichert, M.; Wombacher, A.	Discovering reference process models by mining process variants
2008	C	Int. Conf. for Young Computer Scientists (ICYCS)	Song, W.; Liu, S.; Liu, Q.	Business process mining based on simulated annealing
2008	C	Int. Conf. on Inductive Logic Programming (ILP)	Lamma, E.; Mello, P.; Riguzzi, F.; Storari, S.	Applying inductive logic programming to process mining
2008	C	Int. Provenance and Annotation WS (IPAW)	Oliveira, F. T.; Murta, L.; Werner, C.; Matosso, M.	Using Provenance to Improve Workflow Design
2008	C	IEEE Int. Conf. on Information Reuse and Integration (IRI)	Lai, C.-H.; Liu, D.-R.	Mining knowledge flow for modeling the information needs of task-based groups
2008	C	Int. Symp. on Electronic Commerce and Security (ISECS)	Jiang, G.; Dong, L.	Comparative research of modeling methods for workflow process
2008	C	Int. Symp. on Methodologies for Intelligent Systems (IS-MiS)	Ghiomma, L.; Greco, G.; Guzzo, A.; Pontieri, L.	Outlier detection techniques for process mining applications

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2008	C	Int. Symp. on Knowledge Acquisition and Modeling (KAM)	Yi, J.; Lai, C.	Research on reengineering of ERP system based on data mining and MAS
2008	C	Int. Cong. of the Eur. Federation for Medical Informatics (MIE)	Mans, R. S.; Schonenberg, M. H.; Leonardi, G.; Panzarasa, S.; Cavallini, A.; Quaglini, S.; van der Aalst, W. M. P.	Process mining techniques: An application to stroke care
2008	C	Int. Symp. on Rule Representation, Interchange and Reasoning on the Web (RuleML)	Buffett, S.	Abductive workflow mining using Binary resolution on task successor rules
2008	C	Int. WS on Social Computing, Behavioral Modeling and Prediction (SBP)	Savell, R.; Cybenko, G.	Mining for social processes in intelligence data streams
2008	C	ACM Int. Conf. on Knowledge Discovery and Data Mining (SIGKDD)	Shao, Q.; Chen, Y.; Tao, S.; Yan, X.; Anerousis, N.	Efficient ticket routing by resolution sequence mining
2008	C	Int. Conf. on Designing Interactive User Experiences for TV and Video (UXTV)	Koca, A.; Funk, M.; Karapanos, E.; Rozinat, A.; van der Gaarden, N. D.	Grasping product pragmatics: A case with internet on TV
2008	J	Data and Knowledge Engineering (DKE)	Greco, G.; Guzzo, A.; Pontieri, L.	Mining taxonomies of process models
2008	J	Data and Knowledge Engineering (DKE)	Medeiros, A. K. A.; van der Aalst, W. M. P.; Weijters, A. J. M. M.	Quantifying process equivalence based on observed behavior
2008	J	Decision Support Systems (DSS)	Song, M.; van der Aalst, W. M. P.	Towards comprehensive support for organizational mining
2008	J	Int. J. of Business Process Integration and Management (IJBPM)	Günther, C. W.; Ma, S. R.; Reichert, M.; van der Aalst, W. M. P.; Recker, J.	Using process mining to learn from process changes in evolutionary systems
2008	J	Int. J. of Intelligent Information Technologies (IJIT)	van der Aalst, W. M. P.; Nikolov, A.	Mining e-mail messages: Uncovering interaction patterns and processes using e-mail logs
2008	J	Information Systems (JIS)	Rozinat, A.; van der Aalst, W. M. P.	Conformance checking of processes based on monitoring real behavior
2008	J	J. of Information Science and Engineering (JISE)	Park, M.-J.; Kim, K.	Control-path oriented workflow intelligence analyses
2008	J	Int. J. on Software Tools for Technology Transfer (STTT)	Rozinat, A.; Mans, R. S.; Song, M.; van der Aalst, W. M. P.	Discovering colored Petri nets from event logs
2008	J	Trans. on Petri Nets and Other Models of Concurrency (ToPNoC)	Cabac, L.; Denz, N.	Net Components for the Integration of Process Mining into Agent-Oriented Software Engineering
2008	J	Trans. on Petri Nets and Other Models of Concurrency (ToPNoC)	Lassen, K. B.; van Dongen, B. F.	Translating Message Sequence Charts to other Process Languages Using Process Mining
2009	C	Int. Conf. on Artificial Intelligence and Computational Intelligence (AICI )	Wang, A.; Zhao, W.; Chen, C.; Wu, H.	A GP process mining approach from a structural perspective
2009	C	IEEE Symp. on Advanced Management of Information for Globalized Enterprises (AMIGE)	Ming, L.; Lu, L.; Bei, F.	A workflow-mining-based approach to knowledge maintenance
2009	C	IEEE Asia-Pacific Conf. on Services Computing (APSCC)	Zha, H.; Wang, J.; Wen, L.; Wang, C.	A label-free similarity measure between workflow nets

<sup>a</sup> Legend: C – Conference; J – Journal

Continued on next page

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2009	C	Int. Conf. on Business Intelligence and Financial Engineering (BIFE)	Ang, G.; Yang, Y.; Ming, Z.; Zhang, J.-L.; Wang, Y.-W.	Organizational structure mining based on workflow logs
2009	C	Int. Conf. on Business Information Systems (BIS)	Gerke, K.; Mendling, J.; Tarmyshov, K.	Case construction for mining supply chain processes
2009	C	Int. Conf. on Business Process Management (BPM)	Bose, R. P. J. C.; van der Aalst, W. M. P.	Abstractions in process mining: A taxonomy of patterns
2009	C	Int. Conf. on Business Process Management (BPM)	Buffett, S.; Geng, L.	Bayesian classification of events for task labeling using workflow models
2009	C	Int. Conf. on Business Process Management (BPM)	Carmona, J.; Cortadella, J.; Kishinevsky, M.	Divide-and-conquer strategies for process mining
2009	C	Int. Conf. on Business Process Management (BPM)	Ferreira, D. R.; Gillblad, D.	Discovering process models from unlabelled event logs
2009	C	Int. Conf. on Business Process Management (BPM)	Li, C.; Reichert, M.; Wombacher, A.	Discovering reference models by mining process variants using a heuristic approach
2009	C	Int. Conf. on Business Process Management (BPM)	Li, C.; Reichert, M.; Wombacher, A.	Mining based on learning from process change logs
2009	C	Int. WS on Business Process Modeling, Development and Support (BPMDS)	Bezerra, F.; Wainer, J.; van der Aalst, W. M. P.	Anomaly detection using process mining
2009	C	Int. WS on Business Process Modeling, Development and Support (BPMDS)	Crerie, R.; Baião, F. A.; Santoro, F. M.	Discovering business rules through process mining
2009	C	Int. WS on Business Process Modeling, Development and Support (BPMDS)	Mezebovsky, D.; Soffer, P.; Shimshoni, I.	Pattern mining in system logs: Opportunities for process improvement
2009	C	ISECS Int. Colloquium on Computing, Communication, Control, and Management (CCCM)	Weigang, L.; Chunyan, M.	Enhance process flexibility by case-based reasoning and process mining
2009	C	IEEE Conf. on Commerce and Enterprise Computing (CCEC)	Gerke, K.; Claus, A.; Mending, J.	Process mining of RFID-based supply chains
2009	C	Int. Conf. on Computational Intelligence and Security (CIS)	Zhang, X.; Yin, Y.; Zhang, M.-W.; Zhang, B.	Web service community discovery based on spectrum clustering
2009	C	Int. Conf. on Computer Supported Collaborative Learning (CSCL)	Reimann, P.; Frerejean, J.; Thompson, K.	Using process mining to identify models of group decision making in chat data
2009	C	IEEE Int. Conf. on Computer Supported Cooperative Work in Design (CSCWD)	Dianfang, G.; Qiang, L.	An improved simulated annealing algorithm for process mining
2009	C	IEEE Int. Conf. on Computer Supported Cooperative Work in Design (CSCWD)	Gonalvez, J. C. A. R.; Santoro, F. M.; Baiao, F. A.	Business process mining from group stories
2009	C	WRI World Cong. on Computer Science and Information Engineering (CSIE)	Chen, L.; Xue, T.; Yang, A.	Business process continuous improvement system based on workflow mining technology
2009	C	WRI World Cong. on Computer Science and Information Engineering (CSIE)	Wang, Z.; Wang, J.; Wen, L.; Liu, Y.	Extracting real-life log with data perspective in PLM system for business process analysis

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2009	C	WRI World Cong. on Computer Science and Information Engineering (CSEI)	Weidong, Z.; Weihui, D.; Anhua, W.; Xizochun, F.	Role-activity diagrams modeling based on workflow mining
2009	C	Int. Symp. on Distributed Autonomous Robotic Systems (DARS)	Rozinat, A.; Zickler, S.; Veloso, M.; van der Aalst, W. M. P.; McMullen, C.	Analyzing multi-agent activity logs using process mining techniques
2009	C	Int. Conf. on Educational Data Mining (EDM)	Pechenizkiy, M.; Trcka, N.; Vasilyeva, E.; van der Aalst, W. M. P.; Bra, P.	Process mining online assessment data
2009	C	IEEE Int. Enterprise Distributed Object Computing Conf. (EDOC)	Lautenbacher, F.; Bauer, B.; Förg, S.	Process mining for semantic business process modeling
2009	C	Int. Conf. on Information, Process, and Knowledge Management (eKNOW)	Bozkaya, M.; Gabriels, J.; van der Werf, J. M.	Process diagnostics: A method based on process mining
2009	C	Int. Conf. on Information, Process, and Knowledge Management (eKNOW)	Esfahani, F. S.; Murad, M. A. A.; Sulaiman, M. N.; Udzir, N. I.	SLA-Driven Business Process Distribution
2009	C	Int. Conf. on Fuzzy Systems and Knowledge Discovery (FSKD)	Li, Y.	Rediscovery of government process model in E-government
2009	C	Int. Conf. on Parallel Processing (ICPP)	Kim, K.	Mining workflow processes from xml-based distributed workflow event logs
2009	C	Int. Database Engineering & Applications S. (IDEAS)	Folino, F.; Greco, G.; Guzzo, A.; Pontieri, L.	Discovering expressive process models from noised log data
2009	C	Int. Conf. on Industrial, Engineering and Other Applications of Applied Intelligent Systems (IEA/AIE)	Tsai, C.-Y.; Chen, I.-C.	Using genetic process mining technology to construct a time-interval process model
2009	C	Int. Conf. on Industrial and Information Systems (IIS)	He, S.; Lv, T.; Huang, B.	A new process mining algorithm of workflow
2009	C	Int. Joint Conf. on Artificial Intelligence (IJCAI)	Yaman, F.; Oates, T.; Burstein, M.	A context driven approach for workflow mining
2009	C	Int. Conf. on Intelligent Systems Design and Applications (ISDA)	Trcka, N.; Pechenizkiy, M.	From local patterns to global models: Towards domain driven educational process mining
2009	C	Int. Symp. on Methodologies for Intelligent Systems (IS-MIS)	Geng, L.; Buffett, S.; Hamilton, B.; Wang, X.; Korba, L.; Liu, H.; Wang, Y.	Discovering structured event logs from unstructured audit trails for workflow mining
2009	C	Int. Conf. on Intelligent User Interfaces (IUI)	Shen, J.; Fitzhenry, E.; Dietterich, T. G.	Discovering frequent work procedures from resource connections
2009	C	World Cong. on Nature and Biologically Inspired Computing (NABIC)	Jacob, B.; Promod, K. V.	Change sequence mining for interdependent context aware service processes using partial derivatives
2009	C	Int. Joint Conf. on INC, IMS, and IDC (NCIM)	Hang, Y.; Fong, S.	A framework of business intelligence-driven data mining for e-Business
2009	C	ACM Symp. on Applied Computing (SAC)	Calders, T.; Gunther, C. W.; Pechenizkiy, M.; Rozinat, A.	Using minimum description length for process mining
2009	C	ACM Symp. on Applied Computing (SAC)	Esfahani, F. S.; Murad, M. A. A.; Sulaiman, M. N.; Udzir, N. I.	Using process mining to business process distribution

*Continued on next page*<sup>a</sup> Legend: C – Conference; J – Journal

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2009	C	ACM Symp. on Access Control Models and Technologies (SACMAT)	Colantonio, A.; Pietro, R.; Ocello, A.; Verde, N. V.	A formal framework to elicit roles with business meaning in RBAC systems
2009	C	Euromicro Conf. on Software Engineering and Advanced Applications (SEAA)	Akman, B.; Demirors, O.	Applicability of process discovery algorithms for software organizations
2009	C	ACM Int. Conf. on Knowledge Discovery and Data Mining (SIGKDD)	Berlingero, M.; Pinelli, F.; Nanni, M.; Giannotti, F.	Temporal mining for interactive workflow data analysis
2009	C	Richard Tapia Celebration of Diversity in Computing Conf. (Tapia)	Rembert, A. J.; Ellis, C. A.	An initial approach to mining multiple perspectives of a business process
2009	C	Int. United Information Systems Conf. (UNISON)	Funk, M.; Rozinat, A.; Medeiros, A. K. A.; van der Putten, P.; Corporaal, H.; van der Aalst, W. M. P.	Improving product usage monitoring and analysis with semantic concepts
2009	C	World Cong. on Engineering and Computer Science (WCECS )	Esfahani, F. S.; Murad, M. A. A.; Sulaiman, M. N.; Udzir, N. I.	A Case Study of The Intelligent Process Decentralization Method
2009	C	Int. WS on Computer Science and Engineering (WCSE)	Chen, Z.; Hu, K.; Sun, Y.; Chen, L.	UMFP: Update Mining Frequency Paths in RFID system
2009	C	Int. WS on Knowledge Discovery and Data Mining (WKKD)	She, J.; Yang, D.	Process mining: algorithm for S-Coverable workflow nets
2009	J	Computer Science – Research and Development (CSRD)	van der Aalst, W. M. P.; Pesic, M.; Schonenberg, M. H.	Declarative workflows: Balancing between flexibility and support
2009	J	Data and Knowledge Engineering (DKE)	Rozinat, A.; Wynn, M. T.; van der Aalst, W. M. P.; ter Hofstede, A. H. M.; Fidge, C. J.	Workflow simulation for operational decision support
2009	J	Distributed and Parallel Databases (DPD)	Gaaloul, W.; Bhiri, S.; Haller, A.; Hauswirth, M.	Log-based transactional workflow mining
2009	J	Expert Systems with Applications (ES)	Lau, H. C. W.; Ho, G. T. S.; Chu, K. F.; Ho, W.; Lee, C. K. M.	Development of an intelligent quality management system using fuzzy association rules
2009	J	Int. J. of Production Economics (IJPE)	Lau, H. C. W.; Ho, G. T. S.; Zhao, Y.; Chung, N. S. H.	Development of a process mining system for supporting knowledge discovery in a supply chain network
2009	J	Int. J. of Production Research (IJPR)	Ho, G. T. S.; Lau, H. C. W.; Kwok, S. K.; Lee, C.-K. M.; Ho, W.	Development of a co-operative distributed process mining system for quality assurance
2009	J	Information Systems Frontiers (ISF)	Reijers, H. A.; Song, M.; Jeong, B.	Analysis of a collaborative workflow process with distributed actors
2009	J	J. of Information and Computational Science (JICs)	Li, Y.	A mining method of business process remodeling in E-business
2009	J	J. of Intelligent Information Systems (JIIS)	Wen, L.; Wang, J.; van der Aalst, W. M. P.; Huang, B.; Sun, J.	A novel approach for process mining based on event types
2009	J	Information Systems (JIS)	Rozinat, A.; Mans, R. S.; Song, M.; van der Aalst, W. M. P.	Discovering simulation models
2009	J	Mathematical Structures in Computer Science (JMCS)	Busi, N.; Pinna, G. M.	Process discovery and Petri nets

<sup>a</sup> Legend: C – Conference; J – Journal

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Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2009	J	J. of Systems and Software (JSS)	Duan, H.; Zeng, Q.; Wang, H.; Sun, S.; Xu, D.	Classification and evaluation of timed running schemas for workflow based on process mining
2009	J	Knowledge and Information Systems (KAIS)	Maruster, L.; van Beest, N. R. T. P.	Redesigning business processes: A methodology based on simulation and process mining techniques
2009	J	IEEE Trans. on Systems, Man, and Cybernetics (SMC)	Rozinat, A.; Jong, I. S. M.; Gunther, C. W.; van der Aalst, W. M. P.	Process mining applied to the test process of wafer scanners in ASML
2009	J	Trans. on Petri Nets and Other Models of Computation (ToPNoC)	Bergenthal, R.; Desel, J.; Mauser, S.; Lorenz, R.	Construction of process models from example runs
2009	J	Trans. on Petri Nets and Other Models of Computation (ToPNoC)	Chesani, F.; Lamma, E.; Mello, P.; Montali, M.; Riguzzi, F.; Storari, S.	Exploiting inductive logic programming techniques for declarative process mining
2009	J	IEEE Trans. on Semiconductor Manufacturing (TSM)	Tu, K. K.-W.; Lee, J. C.-S.; Lu, H. H.-S.	A novel statistical method for automatically partitioning tools according to engineers' tolerance control in process improvement
2010	C	Australasian Conf. on Information Systems (ACIS)	Leyer, M.; Moormann, J.	Facilitating operational control of business services: A method for analysing and structuring customer integration
2010	C	WSSEAS Int. Conf. on applied informatics and communications / WSSEAS Int. Conf. on Biomedical electronics and biomedical informatics (AIC/BEBI)	Hassan, O. M.; Farag, M. S.	Constructing Workflow Clusters Based On Appropriateness Conformance Checker
2010	C	WSSEAS Int. Conf. on applied informatics and communications / WSSEAS Int. Conf. on Biomedical electronics and biomedical informatics (AIC/BEBI)	Hassan, O. M.; Farag, M. S.; MohieEl-Din, M.	Reality Mining Via Process Mining
2010	C	Int. Conf. on Business Information Systems (BIS)	Petrusel, R.; Mican, D.	Mining decision activity logs
2010	C	Int. Conf. on Business Information Systems (BIS)	Wegener, D.; Ruping, S.	On integrating data mining into business processes
2010	C	Int. Conf. on Business Process Management (BPM)	Bose, R. P. J. C.; van der Aalst, W. M. P.	Trace alignment in process mining: Opportunities for process diagnostics
2010	C	Int. Conf. on Business Process Management (BPM)	Bose, R. P. J. C.; van der Aalst, W. M. P.	Trace clustering based on conserved patterns: Towards achieving better process models
2010	C	Int. Conf. on Business Process Management (BPM)	Gama, J. M.; Carmona, J.	A fresh look at precision in process conformance
2010	C	Int. Conf. on Business Process Management (BPM)	Gunther, C. W.; Rozinat, A.; van der Aalst, W. M. P.	Activity mining by global trace segmentation
2010	C	Int. Conf. on Business Process Management (BPM)	Nakatumba, J.; van der Aalst, W. M. P.	Analyzing resource behavior using process mining
2010	C	Int. Conf. on Business Process Management (BPM)	van Dongen, B. F.; Adriansyah, A.	Process mining: Fuzzy clustering and performance visualization

<sup>a</sup> Legend: C – Conference; J – Journal

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Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2010	C	Int. Conf. on Business Process Management (BPM)	Veiga, G. M.; Ferreira, D. R.	Understanding spaghetti models with sequence clustering for ProM
2010	C	Int. Conf. on Business Process Management (BPM)	Yahya, B. N.; Bae, H.; Bae, J.	Process design selection using proximity score measurement
2010	C	Int. Conf. on Business Process Management (BPM)	Zhou, W.; Piramuthu, S.	Healthcare process mining with RFID
2010	C	Int. WS on Business Process Modeling, Development and Support (BPMDS)	Dohmen, A.; Moermann, J.	Identifying drivers of inefficiency in business processes: A DEA and Data Mining perspective
2010	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	van der Aalst, W. M. P.; Pesic, M.; Song, M.	Beyond process mining: From the past to present and future
2010	C	IEEE Cong. on Evolutionary Computation (CEC)	Bratosin, C.; Sidorova, N.; van der Aalst, W. M. P.	Distributed genetic process mining
2010	C	IEEE Cong. on Evolutionary Computation (CEC)	Burattin, A.; Sperduti, A.	Automatic Determination of Parameters' Values for Heuristics Miner plus
2010	C	IEEE Cong. on Evolutionary Computation (CEC)	Walicki, M.; Ferreira, D. R.	Mining sequences for patterns with non-repeating symbols
2010	C	ACM Bangalore Conf. (COMPUTE)	Indukuri, K. V.; Krishna, P. R.	Mining E-contract documents to classify clauses
2010	C	Int. Conf. on Risks and Security of Internet and Systems (CRYSIS)	Asfaw, B.; Bekele, D.; Esheite, B.; Villafiorita, A.; Weldemariam, K.	Host-based anomaly detection for pervasive medical systems
2010	C	IEEE Int. Conf. on Computer Supported Cooperative Work in Design (CSCWD)	Gonalvez, J. C. A. R.; Santoro, F. M.; Baiao, F. A.	A case study on designing business processes based on collaborative and mining approaches
2010	C	CIRP-Sponsored Int. Conf. on Digital Enterprise Technology (DET)	Turner, C. J.; Tiwari, A.; Mehnen, J.	Mining Process Flowcharts from Business Data: An Evolutionary Approach
2010	C	Eur. Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD)	Carmona, J.; Cortadella, J.	Process mining meets abstract interpretation
2010	C	Int. Conf. on Educational Data Mining (EDM)	Howard, L.; Johnson, J.; Neitzel, C.	Examining Learner Control in a Structured Inquiry Cycle Using Process Mining
2010	C	Int. Conf. on Educational Data Mining (EDM)	Jeong, H.; Biswas, G.; Johnson, J.; Howard, L.	Analysis of productive learning behaviors in a structured inquiry cycle using hidden Markov models
2010	C	Int. Conf. on Educational Data Mining (EDM)	Southavilay, V.; Yacef, K.; Calvo, R. A.	Process mining to support students' collaborative writing
2010	C	IEEE Int. Enterprise Distributed Object Computing Conf. (EDOC)	Kalsing, A. C.; Nascimento, G. S.; Iochpe, C.; Thom, L. H.	An incremental process mining approach to extract knowledge from legacy systems
2010	C	Eur. Modelling Symp. on Computer Modelling and Simulation (EMS)	Gholami, M. F.; Jamshidi, P.; Shams, F.	A procedure for extracting software development process patterns
2010	C	IEEE Int. Conf. on e-Science (eScience)	Price, S.; Flach, P. A.; Spiegler, S.; Bailey, C.; Rogers, N.	SubShift web services and workflows for profiling and comparing scientists and their published works
2010	C	Int. Euro-Par Conf. on Parallel Processing (Euro-Par)	Vaikhom, G.; Liew, C. S.; Han, L.; van Hemert, J.; Atkinson, M.; Krause, A.	Federated enactment of workflow patterns

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2010	C	Int. Mega-Conf. on Future Generation Information Technology (FGIT)	Chuang, Y.-C.; Hsu, P. Y.; Wang, M.; Chen, S.-C.	A frequency-based algorithm for workflow outlier mining
2010	C	Int. Conf. on Hybrid Artificial Intelligence Systems (HAIS)	Esgin, E.; Senkul, P.; Cimenbicer, C.	A hybrid approach for process mining: Using from-to chart arranged by genetic algorithms
2010	C	Int. Conf. on Computers in Education (ICCE)	Reimann, P.; Calvo, R. A.; Yacef, K.; Southavilay, V.	Comprehensive computational support for collaborative learning from writing
2010	C	Int. Conf. on Communication Software and Networks (ICCSN)	Kim, G.-W.; Lee, S. H.; Kim, J. H.; Son, J. H.	An effective algorithm for business process mining based on modified FP-tree algorithm
2010	C	IEEE Int. Conf. on Data Mining (ICDM)	Palshikar, G. K.; Vin, H. M.; Mudassar, M.; Natu, M.	Domain-driven data mining for IT infrastructure support
2010	C	Industrial Conf. on Advances in Data Mining (ICDM)	Poelmans, J.; Dedene, G.; Verheyden, G.; van der Mussele, H.; Viaene, S.; Peters, E.	Combining business process and data discovery techniques for analyzing and improving integrated care pathways
2010	C	IEEE Int. Conf. on Data Mining (ICDM)	Southavilay, V.; Yacef, K.; Calvo, R. A.	Analysis of collaborative writing processes using hidden markov models and semantic heuristics
2010	C	IEEE Int. Conf. on Data Mining (ICDM)	Talib, R.; Volz, B.; Jablonski, S.	Agent assignment for process management: Agent performance evaluation framework
2010	C	Int. Conf. of the Learning Sciences (ICLS)	Hackbart, A. J.; Derry, S. J.; Eagan, B. R.; Gressick, J.	Adapting workflow technology to design-based research: Development of a method for organizing the "messiness" of research in technology-rich online learning environments
2010	C	IEEE Int. Conf. on Software Engineering and Service Sciences (ICSESS)	Sun, Y.; Zhang, L.; Zhou, Z.; Cai, Y.; Xie, Z.; Yan, Z.	Reconstructing meaningful workflow from transaction logs
2010	C	Int. Conf. on Service Oriented Computing (IC-SOC)	Khan, A.; Lodhi, A.; Koppen, V.; Kassem, G.; Saake, G.	Applying process mining in SOA environments
2010	C	Int. Conf. on Intelligent Environments (IE)	Aztaria, A.; Izaguirre, A.; Basagoiti, R.; Augusto, J. C.; Cook, D. J.	Automatic modeling of frequent user behaviours in intelligent environments
2010	C	Int. Conf. on Information Integration and Web-Based Applications and Services (iiWAS)	Mounira, Z.; Mahmoud, B.	Context-aware process mining framework for business process flexibility
2010	C	Int. Conf. on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU)	Adamczyk, M.; Betlinski, P.; Gora, P.	Combined Bayesian Networks and Rough-Granular Approaches for Discovery of Process Models Based on Vehicular Traffic Simulation
2010	C	IEEE Int. Conf. on Intelligent Systems (IS)	Anwar, F.; Petroniias, I.; Morris, T.; Kodogiannis, V.	Discovery of events with negative behavior against given sequential patterns
2010	C	Int. Symp. on Service Science (ISSS)	Gerke, K.; Petruch, K.; Tamm, G.	Optimization of service delivery through continual process improvement: A case study
2010	C	Int. Conf. on Information Technology for Manufacturing Systems (ITMS)	Liu, B.	Weighted subgraph mining technology to knowledge discovery
2010	C	Int. Conf. on Knowledge-Based and Intelligent Information and Engineering Systems (KES)	Bratosin, C.; Sidorova, N.; van der Aalst, W. M. P.	Discovering process models with genetic algorithms using sampling

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2010	C	Int. Conf. on Knowledge-Based and Intelligent Information and Engineering Systems (KES)	Toth, A.; Nemeth, E.; Hangos, K. M.	Coloured Petri net diagnosers for lumped process systems
2010	C	Int. Conf. on Knowledge-Based and Intelligent Information and Engineering Systems (KES)	Zhang, H.; Liu, Y.; Li, C.; Jiao, R. J.	A novel approach of process mining with event graph
2010	C	Mexican Int. Conf. on Artificial Intelligence: Advances in Artificial Intelligence and Applications (MICAI )	Pelayo, D. A. R.; Trejo-Ramirez, R. A.; Menozza, M. G.; Gress, N. H.	Business process mining and rules detection for unstructured information
2010	C	Int. Conf. on the Modelling and Management of Engineering Processes (MMEP)	Zhang, H.; Liu, Y.; Li, C.; Jiao, R. J.	Deriving Event Graphs through Process Mining for Runtime Change Management
2010	C	WSEAS Int. Conf. on Management, Marketing and Finances (MMF)	Vlahovic, N.; Milanovic, L.; Skrinjar, R.	Using Datamining Methodology for Detecting Turning Points in Business Process Orientation Maturity Models
2010	C	Int. Conf. on Networked Digital Technologies (NDT)	Ghazanfari, M.; Fathian, M.; Jafari, M.; Rouhani, S.	Process mining approach to promote business intelligence in Iranian detectives' police
2010	C	Int. NordDesign Conf. (NordDesign)	Rohner, S.; Donhauser, M.; Wartzack, S.	Comparison of predictive data mining methods for their application in a design process
2010	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	Esparza, J.; Leucker, M.; Schlund, M.	Learning workflow petri nets
2010	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	Sol, M.; Carmona, J.	Process mining from a basis of state regions
2010	C	IEEE Int. Conf. on Services Computing (SCC)	Kumar, R.; Bhattacharyya, C.; Varshtneya, V.	Discovering business process model from unstructured activity logs
2010	C	ACM Int. Conf. on Knowledge Discovery and Data Mining (SIGKDD)	Lou, J.-G.; Fu, Q.; Yang, S.; Li, J.; Wu, B.	Mining program workflow from interleaved traces
2010	C	IEEE/WIC/ACM Int. Conf. on Web Intelligence (WI)	Hoxha, J.; Agarwal, S.	Semi-automatic acquisition of Semantic descriptions of processes in the Web
2010	J	IEEE Computational Intelligence Magazine (CIM)	van der Aalst, W. M. P.	Process discovery: Capturing the invisible
2010	J	Data and Knowledge Engineering (DKE)	Wen, L.; Wang, J.; van der Aalst, W. M. P.; Huang, B.; Sun, J.	Mining process models with prime invisible tasks
2010	J	Decision Support Systems (DSS)	Edgington, T. M.; Raghuram, T. S.; Vinze, A. S.	Using process mining to identify coordination patterns in IT service management
2010	J	Decision Support Systems (DSS)	Zhou, W.; Piramuthu, S.	Framework, strategy and evaluation of health care processes with RFID
2010	J	Future Generation Computer Systems (FGCS)	Folino, G.; Forestiero, A.; Papuzzo, G.; Spezzano, G.	A grid portal for solving geoscience problems using distributed knowledge discovery services
2010	J	Int. J. of Cooperative Information Systems (IJCIS)	Li, C.; Reichert, M.; Wombacher, A.	The minadepth clustering approach for discovering reference process models out of process variants
2010	J	Int. J. of Data Mining, Modelling and Management (IJDMMM)	Chen, W.; Lu, J.; Keech, M.	Discovering exclusive patterns in frequent sequences

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2010	J	Information Systems and e-Business Management (ISoBM) Applied Intelligence (JAI)	Li, J.; Wang, H. J.; Zhang, Z.; Zhao, J. L. Tsai, C.-Y.; Jen, H.; Chen, Y.-C.	A policy-based process mining framework: Mining business policy texts for discovering process models Time-interval process model discovery and validation-a genetic process mining approach
2010	J	J. of Computer Science and Technology (JCST) J.of Systems Science and Systems Engineering (JSSSE)	Zhang, M.-W.; Zhang, B.; Liu, Y.; Na, J.; Zhu, Z.-L.	Web service composition based on QoS rules
2010	J	J. of Software Maintenance and Evolution (SME)	Ou-Yang, C.; Juan, Y.-C.	Applying process mining approach to support the verification of a multi-agent system
2010	J	J. of Software Maintenance and Evolution (SME)	Buffett, S.; Geng, L.	Using classification methods to label tasks in process mining
2010	J	Software and Systems Modeling (SoSym)	Quaglini, S.	Information and communication technology for process management in healthcare: A contribution to change the culture of blame
2010	J	WS-EAS Trans. on Business and Economics (TBE)	van der Aalst, W. M. P.; Rubin, V.; Verbeek, H. M. W.; van Dongen, B. F.; Kindler, E.; Gunther, C. W.	Process mining: A two-step approach to balance between underfitting and overfitting
2010	J	IEEE Trans. on Computers (TC)	Vlahovic, N.; Milanovic, L.; Skrinjar, R.	Turning points in business process orientation maturity model: An East European survey
2010	J	World Academy of Science, Engineering and Technology (WASET)	Carmona, J.; Cortadella, J.; Kishinevsky, M. Jalali, H.; Barani, A.	New region-based algorithms for deriving bounded petri nets Genetic-based anomaly detection in logs of process aware systems
2011	C	Int. Conf. on Advanced Design and Manufacturing Engineering (ADME)	Chen, L.; Liu, Q.; Li, X.	Quality management process continuous improvement based on workflow mining
2011	C	IEEE/ACS Int. Conf. on Computer Systems and Applications (AICCSA)	Viale, P.; Frydman, C.; Pinaton, J.	New methodology for modeling large scale manufacturing process: Using process mining methods and experts' knowledge
2011	C	Int. WS on Business Process Intelligence (BPI)	Weerdt, J.; Backer, M.; Vanthienen, J.; Bae-sens, B.	A critical evaluation study of model-log metrics in process discovery
2011	C	Int. Conf. on Business Process Management (BPM)	Adriansyah, A.; van Dongen, B. F.; van der Aalst, W. M. P.	Towards robust conformance checking
2011	C	Int. Conf. on Business Process Management (BPM)	Fahland, D.; van der Aalst, W. M. P.	Simplifying mined process models: An approach based on unfolding
2011	C	Int. Conf. on Business Process Management (BPM)	Kato, K.; Kanai, T.; Uehara, S.	Source code partitioning using process mining
2011	C	Int. Conf. on Business Process Management (BPM)	Li, J.; Bose, R. P. J. C.; van der Aalst, W. M. P.	Mining context-dependent and interactive business process maps using execution patterns
2011	C	Int. Conf. on Business Process Management (BPM)	Wegener, D.; Ruping, S.	On reusing data mining in business processes – A pattern-based approach
2011	C	Int. WS on Business Process Modeling, Development and Support (BPMDS)	Jans, M. J.; Depaire, B.; Vanhoof, K.	Does process mining add to internal auditing? An experience report

<sup>a</sup> Legend: C – Conference; J – Journal]*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2011	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Awad, A.; Gore, R.; Thomson, J.; Weidlich, M.	An iterative approach for business process template synthesis from compliance rules
2011	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Bose, R. P. J. C.; van der Aalst, W. M. P.; Zliobaite, I.; Pechenizkiy, M.	Handling concept drift in process mining
2011	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Claes, J.; Poels, G.	Integrating computer log files for process mining: A genetic algorithm inspired technique
2011	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Guabnini, A.; Nezhad, H. R. M.; Benatallah, B.	Using graph aggregation for service interaction message correlation
2011	C	CAiSE Forum on Information Systems Evolution (CAiSE Forum)	Verbeek, H. M. W.; Buijs, J. C. A. M.; van Dongen, B. F.; van der Aalst, W. M. P.	XES, XESame, and ProM 6
2011	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	Burattin, A.; Vigo, R.	A framework for semi-automated process instance discovery from decorative attributes
2011	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	Gama, J. M.; Carmona, J.	Enhancing precision in Process Conformance: Stability, confidence and severity
2011	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	Loglisci, C.; Ceci, M.; Appice, A.; Malerba, D.	Discovering process models through relational disjunctive patterns mining
2011	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	Maggi, F. M.; Mooij, A. J.; van der Aalst, W. M. P.	User-guided discovery of declarative process models
2011	C	Int. Conf. on Computational Intelligence and Security (CIS)	Li, J.; Ouyang, J.; Feng, M.	A heuristic genetic process mining algorithm
2011	C	Int. Conf. on Computational Intelligence and Security (CIS)	Zhao, W.; Liu, X.; Wang, A.	Simplified business process model mining based on Structured-Metric
2011	C	Eur. Conf. on Software Maintenance and Reengineering (CSMR)	Poncin, W.; Serebrenik, A.; van den Brand, M.	Process mining software repositories
2011	C	IEEE Int. Conf. on Dependable, Autonomic and Secure Computing (DASC)	Wang, D.; Ge, J.; Hu, H.; Luo, B.	A new process mining algorithm based on event type
2011	C	ACM Int. Conf. on Distributed Event-Based Systems (DEBS)	Rozsnyai, S.; Slominski, A.; Lakshmanan, G. T.	Discovering event correlation rules for semi-structured business processes
2011	C	Int. Conf. on Electronic Commerce and Web Technologies (EC-Web)	Engel, R.; Krathu, W.; Zapletal, M.; Pichler, C.; van der Aalst, W. M. P.; Werthner, H.	Process mining for electronic data interchange
2011	C	IEEE Int. Enterprise Distributed Object Computing Conf. (EDOC)	Adriansyah, A.; van Dongen, B. F.; van der Aalst, W. M. P.	Conformance checking using cost-based fitness analysis
2011	C	IEEE Int. Conf. of Engineering in Medicine and Biology Society (EMBS)	Llatas, C. F.; Gomez, J. M. G.; Vicente, J.; Naranjo, J. C.; Robles, M.; Benedi, J. M.; Traver, V.	Behaviour patterns detection for persuasive design in Nursing Homes to help dementia patients
2011	C	Int. Symp. on Empirical Software Engineering and Measurement (ESEM)	Castillo, R. P.; Gonzalez, L. S.; Piattoni, M.; Garcia, F.; Guzman, I. G.-R.	Obtaining thresholds for the effectiveness of business process mining
2011	C	IEEE GCC Conf. and Exhibition (GCC)	Weber, P.; Bordbar, B.; Tino, P.; Majeed, B.	A framework for comparing process mining algorithms

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2011	C	IEEE Int. Conf. on Granular Computing (GrC)	Xuedong, G.; Hua, Q.	An evolving process mining algorithm based on stable stages analysis
2011	C	Int. Conf. on Hybrid Artificial Intelligence Systems (HAIS)	Esgin, E.; Senkul, P.	Delta analysis: A hybrid quantitative approach for measuring discrepancies between business process models
2011	C	Hawaii Int. Conf. on System Sciences (HICSS)	Lee, Y.; Jana, S.; Mylavaramu, T.; Dinakarpandian, D.; Owens, D.	MindFlow: Intelligent workflow for clinical trials in mental healthcare
2011	C	Hawaii Int. Conf. on System Sciences (HICSS)	Werner, M.; Gehrkne, N.; Nuttgens, M.	Business process mining and reconstruction for financial audits
2011	C	IEEE Int. Conf. on Data Mining (ICDM)	Talib, R.; Volz, B.; Jablonski, S.	Agent assignment for process management: Competency-driven Dynamic Resource Management Methodology
2011	C	Int. Conf. on Electronic Business (ICEB)	Jareevongpiboon, W.; Janecek, P.	Enhancing decision patterns discovered by process mining with semantic related data
2011	C	Int. Conf. on Enterprise Information Systems (ICEIS)	Kikuchi, S.; Matsumoto, Y.; Adachi, M.; Moritomo, S.	Process mining for job nets in integrated enterprise systems
2011	C	Int. Conf. on Intelligent Data Engineering and Automated Learning (IDEAL)	Weber, P.; Bordbar, B.; Tino, P.	A principled approach to the analysis of process mining algorithms
2011	C	Int. MultiConf. of Engineers and Computer Scientists (IMECS)	Farkhady, R. Z.; Aali, S. H.	A probabilistic approach for process mining in incomplete and noisy logs
2011	C	Int. Conf. on Intelligent Engineering Systems (INES)	Simo, B.; Habala, O.; Tran, V.; Krammer, P.; Hluchy, L.	Using ADMIRE data mining and integration tools in hydrological forecast use case
2011	C	Innovating Service Systems WS (ISS)	Nara, A.; Izumi, K.; Iseki, H.; Suzuki, T.; Nambu, K.; Sakurai, Y.	Surgical workflow monitoring based on trajectory data mining
2011	C	Int. WS on Mobile Business Collaboration (MBC)	Hu, H.; Xie, J.; Hu, H.	A new method for business process mining based on state equation
2011	C	Int. Conf. on Material Engineering, Chemistry, Bioinformatics (MECB)	Zhang, J.; Yang, J.; Shen, S.; Chen, H.	Process optimization of candy production based on data mining
2011	C	OOPS LA – Educators' & trainers' S. (OOPSLA – ETS)	Poncin, W.; Serebrenik, A.; van den Brand, M.	Mining student capstone projects with FRASR and Prom
2011	C	Int. Conf. on Parallel Computing Technologies (PACT)	Bratosin, C.; Sidorova, N.; van der Aalst, W. M. P.	Distributed genetic process mining using sampling
2011	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	Westergaard, M.; Maggi, F. M.	Modeling and verification of a protocol for operational support using coloured Petri nets
2011	C	Working Conf. on the Practice of Enterprise Modeling (PoEM)	van der Aalst, W. M. P.	Intra- and inter-organizational process mining: Discovering processes within and between organizations
2011	C	Int. Conf. on Research Challenges in Information Science (RCIS)	van Hee, K. M.; Liu, Z.; Sidorova, N.	Is my event log complete? – A probabilistic approach to process mining
2011	C	ACM Symp. on Applied Computing (SAC)	Castillo, R. P.; Guzman, I. G.-R.; Piattini, M.; Weber, B.; Places, A. S.	An empirical comparison of static and dynamic business process mining
2011	C	IEEE Int. Conf. on Systems, Man and Cybernetics (SMC)	Iemos, A. M.; Sabino, C. C.; Lima, R. M. F.; Oliveira, C. A. L.	Using process mining in software development process management: A case study

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2011	C	IEEE Int. Conf. on Service-Oriented Computing and Applications (SOCA)	Wombacher, A.; Iacob, M.; Hartsma, M.	Towards a performance estimate in semi-structured processes
2011	C	IEEE Int. Conf. on Trust, Security and Privacy in Computing and Communications (TrustCom)	Han, B.; Jiang, L.; Cai, H.	Abnormal process instances identification method in healthcare environment
2011	C	Conf. of the Workgroup Human-Computer Interaction and Usability Engineering of the Austrian Computer Society (USAB)	Ciccio, C.; Mecella, M.; Catarci, T.	Representing and visualizing mined artificial processes in MailOfMine
2011	C	Conf. of the Workgroup Human-Computer Interaction and Usability Engineering of the Austrian Computer Society (USAB ) (ConsIS)	Dunkl, R.; Froschl, K. A.; Grossmann, W.; Ma, S. R.	Assessing medical treatment compliance based on formal process modeling
2011	J	Computer Science and Information Systems	Fang, X. W.; Jiang, C. J.; Yin, Z.; Fan, X. Q.	The Trustworthiness Analyzing of Interacting Business Process Based on the Induction Information
2011	J	Data and Knowledge Engineering (DKE)	Li, C.; Reichert, M.; Wombacher, A.	Mining business process variants: Challenges, scenarios, algorithms
2011	J	Data and Knowledge Engineering (DKE)	Walicki, M.; Ferreira, D. R.	Sequence partitioning for process mining with unlabeled event logs
2011	J	Expert Systems with Applications (ESA)	Huang, Z.; Lu, X.; Duan, H.	Mining association rules to support resource allocation in business process management
2011	J	Expert Systems with Applications (ESA)	Jans, M. J.; van der Werf, J. M.; Lybaert, N.; Vanhoof, K.	A business process mining application for internal transaction fraud mitigation
2011	J	Expert Systems with Applications (ESA)	Kositanurit, B.; Bryson, K.-M. O.; Ngwenyama, O.	Re-examining information systems user performance: Using data mining to identify properties of IS that lead to highest levels of user performance
2011	J	Expert Systems with Applications (ESA)	Ou-Yang, C.; Winario, H.	Petri-net integration – An approach to support multi-agent process mining
2011	J	Fundamenta Informaticae (F)	Esparza, J.; Leucker, M.; Schlund, M.	Learning workflow Petri nets
2011	J	ICIC Express Letters (ICIC-EL)	Kang, B.; Lee, J.; Kim, D.; Kang, D.-H.	KNNI-SVM: A hybrid algorithm integrating imputation and support vector machine for real-time business process monitoring
2011	J	Int. J. on Artificial Intelligence Tools (IJAIT)	Ma, H.; Tang, Y.; Wu, L.	Incremental mining of processes with loops
2011	J	Int. J. of Business Intelligence and Data Mining (IJBIDM)	Nimmagadda, S. L.; Dreher, H.	Data warehousing and mining technologies for adaptability in turbulent resources business environments
2011	J	Int. J. of Business Process Integration and Management (IJBPM)	Bezerra, F.; Wainer, J.	Fraud detection in process aware systems
2011	J	Int. J. of Business Process Integration and Management (IJBPM)	da Cruz, J. I. B.; Ruiz, D. D.	Conformance analysis on software development: An experience with process mining
2011	J	Int. J. of Business Process Integration and Management (IJBPM)	Wegener, D.; Ruping, S.	Integration and reuse of data mining in business processes – A pattern-based approach

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2011	J	Int. J. of Control and Automation (IJCAS)	Wang, M. T.; Hsu, P. Y.; Chuang, Y.-C. Yingbo, L.; Li, Z.; Jiannin, W.	Mining workflow outlier with a frequency-based algorithm Mining workflow event log to facilitate parallel work item sharing among human resources
2011	J	Int. J. of Computer Integrated Manufacturing (IJCIM)	Mak, M. K. Y.; Ho, G. T. S.; Ting, S. L.	A financial data mining model for extracting customer behavior
2011	J	Int. J. of Engineering Business Management (IJEBM)	Castillo, R. P.; Weber, B.; Pinggera, J.; Zugal, S.; Guzman, I. G.-R.; Piattini, M.	Generating event logs from non-process-aware systems enabling business process mining
2011	J	Enterprise Information Systems (IEIS)	Wetzsteina, B.; Leitnerb, P.; Rosenberg, F.; Dustdar, S.; Leymann, F.	Identifying influential factors of business process performance using dependency analysis
2011	J	Information Systems Frontiers (ISF)	Li, M.; Liu, L.; Yin, L.; Zhu, Y.	A process mining based approach to knowledge maintenance
2011	J	Information Technology J. (ITJ)	Fang, X.; Gao, X.; Yin, Z.; Zhao, Q.	An efficient process mining method based on discrete particle swarm optimization
2011	J	J. of Ambient Intelligence and Humanized Computing (JAHC)	Jaroucheh, Z.; Liu, X.; Smith, S.	Recognize contextual situation in pervasive environments using process mining techniques
2011	J	Applied Soft Computing J. (JASC)	Goedertier, S.; Weerdt, J.; Martens, D.; Van-thienen, J.; Baesens, B.	Process discovery in event logs: An application in the telecom industry
2011	J	J. of Computational Information Systems (JCIS)	Hu, H.; Xie, J.; Hu, H.	A novel approach for mining stochastic process model from workflow logs
2011	J	Industrial Engineering (JIE)	Ruiz, G. C.; Sepulveda, M.	Discovering the source of failures
2011	J	Information Systems (JIS)	van der Aalst, W. M. P.; Schonenberg, M. H.; Song, M.	Time prediction based on process mining
2011	J	IEEE Trans. on Systems, Man, and Cybernetics (SMC)	Sun, S. X.; Zeng, Q. T.; Wang, H.	Process-Mining-Based Workflow Model Fragmentation for Distributed Execution
2011	J	Software Quality J. (SQJ)	Samalkova, J.; Kusters, R.; Trienekens, J.; Weijters, T.; Siemons, P.	Toward objective software process information: Experiences from a case study
2011	J	ACM Trans. on Intelligent Systems and Technology (TIST)	Haigh, K. Z.; Yaman, F.	RECYCLE: Learning looping workflows from annotated traces
2012	C	Int. Conf. on Application of Concurrency to System Design (ACSD)	Sol, M.; Carmona, J.	A high-level strategy for C-net discovery
2012	C	Americas Conf. on Information Systems (AM-CIS)	Caron, F.; vanden Broucke, S. K. L. M.; Van-thienen, J.; Baesens, B.	On the distinction between truthful, invisible, false and unobserved events: An event existence classification framework and the impact on business process analytics related research areas
2012	C	Int. Conf. on Business Information Systems (BIS)	Ciccio, C.; Mecella, M.	Mining constraints for artful processes
2012	C	Int. Conf. on Business Information Systems (BIS)	Leoni, M.; van der Aalst, W. M. P.; van Dongen, B. F.	Data- and Resource-Aware Conformance Checking of Business Processes
2012	C	Int. Conf. on Business Process Management (BPM)	Claes, J.; Poels, G.	Merging computer log files for process mining: An artificial immune system technique

<sup>a</sup> Legend: C – Conference; J – Journal

Continued on next page

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2012	C	Int. Conf. on Business Process Management (BPM)	Fahland, D.; van der Aalst, W. M. P.	Repairing process models to reflect reality
2012	C	Int. Conf. on Business Process Management (BPM)	Ferreira, D. R.; Alves, C.	Discovering user communities in large event logs
2012	C	Int. Conf. on Business Process Management (BPM)	Leoni, M.; Maggi, F. M.; van der Aalst, W. M. P.	Aligning event logs and declarative process models for conformance checking
2012	C	Int. Conf. on Business Process Management (BPM)	Ramezani, E.; Fahland, D.; van der Aalst, W. M. P.	Where did I misbehave? Diagnostic information in compliance checking
2012	C	Int. Conf. on Business Process Management (BPM)	Swinnen, J.; Depaire, B.; Jans, M. J.; Vanhoof, K.	A process deviation analysis – A case study
2012	C	Int. Conf. on Business Process Management (BPM)	van der Werf, J. M.; Verbeek, H. M. W.; van der Aalst, W. M. P.	Context-aware compliance checking
2012	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Binder, M.; Dorda, W.; Duftschmid, G.; Dunkl, R.; Froschl, K. A.; Gall, W.; Grossmann, W.; Harmankaya, K.; Hronsky, M.; Ma, S. R.; Rinner, C.; Weber, S.	On analyzing process compliance in skin cancer treatment: An experience report from the evidence-based medical compliance cluster (EBMC 2)
2012	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Engel, R.; van der Aalst, W. M. P.; Zapletal, M.; Pichler, C.; Werthner, H.	Mining inter-organizational business process models from EDI messages: A case study from the automotive sector
2012	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Iy, L. T.; Indriono, C.; Mangler, J.; Ma, S. R.	Data transformation and semantic log purging for process mining
2012	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Maggi, F. M.; Bose, R. P. J. C.; van der Aalst, W. M. P.	Efficient discovery of understandable declarative process models from event logs
2012	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Nakatumba, J.; Westergaard, M.; van der Aalst, W. M. P.	Generating event logs with workload-dependent speeds from simulation models
2012	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Petrusel, R.	Aggregating individual models of decision-making processes
2012	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	vanden Broucke, S. K. L. M.; Weerdt, J.; Baesens, B.; Vanthienen, J.	Improved artificial negative event generation to enhance process event logs
2012	C	IEEE Cong. on Evolutionary Computation (CEC)	Buijs, J. C. A. M.; van Dongen, B. F.; van der Aalst, W. M. P.	A genetic algorithm for discovering process trees
2012	C	IEEE Cong. on Evolutionary Computation (CEC)	Weerdt, J.; vanden Broucke, S. K. L. M.; Vanthienen, J.; Baesens, B.	Leveraging process discovery with trace clustering and text mining for intelligent analysis of incident management processes
2012	C	Int. Conf. on Computer Information Systems and Industrial Management (CISIM)	Martinovic, J.; Draždilova, P.; Slaminova, K.; Koçyan, T.; Snasel, V.	Left-right oscillate algorithm for community detection used in e-learning system
2012	C	Int. Conf. on Cooperative Information Systems (CoopIS)	Folino, F.; Guarascio, M.; Pontieri, L.	Discovering context-aware models for predicting business process performances
2012	C	IEEE Int. Conf. on Computer Supported Cooperative Work in Design (CSCWD)	Soares, D. C.; Santoro, F. M.; Baião, F. A.	EMail Mining: Knowledge intensive process discovery through e-mails

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2012	C	Int. Conf. on Computer Science and Service System (CSSS )	Ping, Z.; Jun, Q.; Chen, H.; Xi, L.	Study of the process modeling based on petri net
2012	C	Int. WS on Databases, Texts, Specifications and Objects (DATESO)	Slaninova, K.; Koçyan, T.; Martinovic, J.; Drazdilova, P.; Snasel, V.	Dynamic time warping in analysis of student behavioral patterns
2012	C	Eur. Conf. on Artificial Intelligence (ECAI)	Greco, G.; Guizzo, A.; Pontieri, L.	Process discovery via precedence constraints
2012	C	Int. Conf. on Electronic Commerce and Web Technologies (EC-Web)	Hanachi, C.; Gaaloul, W.; Mondi, R.	Performative-based mining of workflow organizational structures
2012	C	IEEE Int. Enterprise Distributed Object Computing Conf. (EDOC)	Burattin, A.; Maggi, F. M.; van der Aalst, W. M. P.; Sperduti, A.	Techniques for a posteriori analysis of declarative processes
2012	C	Int. Conf. on Fundamental Approaches to Software Engineering (FASE)	Maggi, F. M.; Montali, M.; van der Aalst, W. M. P.	An operational decision support framework for monitoring business constraints
2012	C	Int. Conf. on Information Fusion (FUSION)	Solano, M. A.; Jernigan, G.	Enterprise data architecture principles for high-level Multi-Int fusion: A pragmatic guide for implementing a heterogeneous data exploitation framework
2012	C	Int. WS on Health and Well-being Technologies and Services for Elderly (HWTS)	Zhang, Y.; Martikainen, O.; Pulli, P.; Naumov, V.	Developing a real-time process data acquisition system for automatic process measurement
2012	C	Int. Conf. on Case-Based Reasoning (ICCBR)	Montani, S.; Leonardi, G.	Retrieval and clustering for business process monitoring: Results and improvements
2012	C	IEEE Int. Conf. on Intelligent Computer Communication and Processing (ICCP)	Chifu, V. R.; Pop, C. B.; Salomie, I.; Balla, I.; Pavén, R.	Hybrid particle swarm optimization method for process mining
2012	C	Int. Conf. on Computational Science and Its Applications (ICCSA)	Armentano, M. G.; Amandi, A. A.	Towards a goal recognition model for the organizational memory
2012	C	Int. Conf. on Digital Image Processing (ICDIP)	Feng, J.; Chang, H.; Lin, X.	An improved algorithm for discovering the models with short loops constructs
2012	C	IEEE/ACIS Int. Conf. on Computer and Information Science (ICIS)	Wang, Z.; Yao, Q.; Sun, Y.	The research of process mining assessment used in business intelligence
2012	C	IEEE Int. Conf. on Information Science and Technology (ICIST)	Xue, G.; Ye, X.; Yang, J.	Pseudo-parallel genetic algorithm in process mining
2012	C	Int. Conf. on Management Science & Engineering (ICMSEM)	Huang, Z. M.; Cong, Q.-S.; Hu, J. B.	Information System Risk Auditing Model Based on Process Mining
2012	C	Int. Conf. on Theory and Practice of Model Transformations (ICMT)	Roperio, M. F.; Castillo, R. P.; Weber, B.; Piattini, M.	Empirical assessment of business model transformations based on model simulation
2012	C	Int. Conf. on Swarm Intelligence (ICSI )	Zhao, W.; Lin, Q.; Shi, Y.; Fang, X.	Mining the role-oriented process models based on genetic algorithm
2012	C	Int. Conf. on Service-Oriented Computing (ICSO)	Stocker, T.	Data flow-oriented process mining to support security audits
2012	C	Int. Conf. on ICT and Knowledge Engineering (ICT&KE)	Anuwatvisit, S.; Tungkasthan, A.; Premchaiswadi, W.	Bottleneck mining and Petri net simulation in education situations

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2012	C	Int. Conf. on ICT and Knowledge Engineering (ICT&KE)	Ayutaya, N. S. N.; Palungsuntikul, P.; Premchaiswadi, W.	Heuristic mining: Adaptive process simplification in education
2012	C	Int. Conf. on ICT and Knowledge Engineering (ICT&KE)	Potavin, J.; Jongswat, N.; Premchaiswadi, W.	Applying Fuzzy-Genetic mining in conformance and dependency relations
2012	C	Int. Conf. on ICT and Knowledge Engineering (ICT&KE)	Reungrungsee, J.; Intarasema, S.; Porouhan, P.; Premchaiswadi, W.	Process Mining alpha-Algorithm as a Tool (A Case Study of Student Registration)
2012	C	Int. Conf. on ICT and Knowledge Engineering (ICT&KE)	Weerapong, S.; Porouhan, P.; Premchaiswadi, W.	Process mining using ?-algorithm as a tool (A case study of student registration)
2012	C	Int. Conf. on ICT and Knowledge Engineering (ICT&KE)	Weerapong, S.; Porouhan, P.; Premchaiswadi, W.	A novel behavioral similarity measure for artifact-oriented business processes
2012	C	Int. Conf. on Technology for Education and Learning (ICTEL)	Liu, H.; Liu, G.; Wang, Y.; Liu, D.	On recommendation of process mining algorithms
2012	C	IEEE Int. Conf. on Web Services (ICWS)	Wang, J.; Wong, R. K.; Ding, J.; Guo, Q.; Wen, L.	Online techniques for dealing with concept drift in process mining
2012	C	Int. Symp. on Intelligent Data Analysis (IDA)	Carmona, J.; Gavaldà, R.	A framework for application of tree-structured data mining to process log analysis
2012	C	Int. Conf. on Intelligent Data Engineering and Automated Learning (IDEAL)	Bui, D. B.; Hadžić, F.; Potdar, V.	Mining and checking web services behavior
2012	C	IEEE Int. Conf. on Industrial Informatics (INDIN)	Wan, X.; Mao, X.; Dai, Z.	A method of adaptive process mining based on time-varying sliding window and relation of adjacent event dependency Rule-based business process mining: Applications for management
2012	C	Int. Conf. on Intelligent Systems Design and Engineering Applications (ISDEA)	Shi, M.-H.; Jang, S.-S.; Guo, Y.-G.; Chen, L.; Cao, K.-D.	Process mining and security: Visualization in database intrusion detection
2012	C	Int. Symp. on Management Intelligent Systems (MIS)	Caron, F.; Vanthienen, J.; Baesens, B.	On the ?-reconstructibility of workflow nets
2012	C	Pacific Asia WS on Intelligence and Security Informatics (PAISI)	Huynh, V. H.; Le, A. N. T.	Modeling and mining of learnflows
2012	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	Badouel, E.	An infrastructure for cost-effective testing of operational support algorithms based on colored Petri nets
2012	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	Bergenthal, R.; Desel, J.; Harrer, A.; Mauser, S.	Decomposing process mining problems using passages
2012	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	Nakatumba, J.; Westergaard, M.; van der Aalst, W. M. P.	Aggregating causal runs into workflow nets
2012	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	van Dongen, B. F.; Desel, J.; van der Aalst, W. M. P.	Process mining approach for traffic analysis in wireless mesh networks (ruSMART)
2012	C	Conf. on Internet of Things and Smart Spaces	Krirkin, K.; Kalishenko, E.; Prakash, S. P. S.	<i>Continued on next page</i>

<sup>a</sup> Legend: C – Conference; J – Journal

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2012	C	ACM Symp. on Applied Computing (SAC)	Accorsi, R.; Stocker, T.	On the exploitation of process mining for security audits: The conformance checking case
2012	C	ACM Symp. on Applied Computing (SAC)	Castillo, R. P.; Guzman, I. G.-R.; Piattini, M.; Weber, B.	Integrating event logs into KDM repositories
2012	C	Int. Conf. on Sciences of Electronics, Technologies of Information and Telecommunications (SETIT)	Abdelkafi, M.; Bousabeh, D.; Bouzguenda, L.; Gargouri, F.	A comparative study of Workflow Mining systems
2012	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	Ciccio, C.; Mecella, M.; Scannapieco, M.; Zardetto, D.; Catarci, T.	MailOfMine – Analyzing mail messages for mining artful collaborative processes
2012	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	Taylor, P.; Leida, M.; Majeed, B.	Case study in process mining in a multinational enterprise
2012	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	van der Aalst, W. M. P.; Buijs, J. C. A. M.; van Dongen, B. F.	Towards improving the representational bias of process mining
2012	C	IEEE Int. Conf. on Systems, Man and Cybernetics (SMC)	Kaymak, U.; Mans, R. S.; van de Steeg, T.; Dierks, M.	On process mining in health care
2012	C	Int. Joint Conf. on Signal Processing and Information Technology / Int. Conf. on Recent Trends in Information Processing and Computing (SPIT/IPC)	Wang, X.; Zhang, L.; Cai, H.	Using suffix-tree to identify patterns and cluster traces from event log
2012	C	IEEE Int. Conf. on Ubiquitous Intelligence and Computing and IEEE Int. Conf. on Autonomic and Trusted Computing (UIC-ATC)	Gama, J. M.; Echizen, I.	Insuring sensitive processes through process mining
2012	C	WS on Enabling Technologies, Infrastructure for Collaborative Enterprises (WETICE)	Sellami, R.; Gaaloul, W.; Moalla, S.	An ontology for workflow organizational model mining
2012	J	Artificial Intelligence in Medicine (AIM)	Huang, Z.; Lu, X.; Duan, H.	On mining clinical pathway patterns from medical behaviors
2012	J	Advances in Information Sciences and Service Sciences (AISS)	Li, M.	Process mining in knowledge maintenance a case study
2012	J	Computers in Human Behavior (CHB)	Schoor, C.; Bannert, M.	Exploring regulatory processes during a computer-supported collaborative learning task using process mining
2012	J	Data Mining and Knowledge Discovery (DMKD)	Carmona, J.	Projection approaches to process mining using region-based techniques
2012	J	Decision Support Systems (DSS)	Liu, Y.; Zhang, H.; Li, C.; Jiao, R. J.	Workflow simulation for operational decision support using event graph through process mining
2012	J	Expert Systems with Applications (ESA)	Huang, Z.; Lu, X.; Duan, H.	Resource behavior measure and application in business process management
2012	J	Expert Systems with Applications (ESA)	Lim, A. H. L.; Lee, C.-S.; Raman, M.	Hybrid genetic algorithm and association rules for mining workflow best practices
2012	J	Expert Systems with Applications (ESA)	Wang, D.; Ge, J.; Hu, H.; Luo, B.; Huang, L.	Discovering process models from event multiset

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2012	J	Future Generation Computer Systems (FGCS)	Rasmussen, R.; Brown, R.	A deductive system for proving workflow models from operational procedures
2012	J	IEICE Trans. on Information and Systems (IEICE TIS)	Kim, K.; Jung, J.-Y.; Park, J.	Discovery of information diffusion process in social networks
2012	J	Int. J. of Business Process Integration and Management (IJBPM)	Ferreira, D. R.; Thom, L. H.	A semantic approach to the discovery of workflow activity patterns in event logs
2012	J	Int. J. of Communication Networks and Information Security (IJCNCS)	Jalali, H.; Baraani, A.	Process aware host-based intrusion detection model
2012	J	Enterprise Information Systems (IJEIS)	Ingvoldsen, J. E.; Gulla, J. A.	Industrial application of semantic process mining
2012	J	Int. J. of Innovative Computing, Information and Control (IJICIC)	Gama, J. M.; Carmona, J.	A general framework for precision checking
2012	J	Int. J. of Innovative Computing, Information and Control (IJICIC)	Kim, K. P.	An ICN-based workflow process rediscovery framework
2012	J	Int. J. of Innovative Computing, Information and Control (IJICIC)	Yin, J.; Cao, B.; Deng, S.; Wu, Z.	Process discovery from the log of business rule engine
2012	J	Management Research Review (IJMRR)	Leyer, M.; Moormann, J.	A method for matching customer integration with operational control of service processes
2012	J	INFORMS J. on Computing (IJOC)	Huang, Z.; Kumar, A.	A study of quality and accuracy trade-offs in process mining
2012	J	J. of Biomedical Informatics (JBI)	Bonaria, L.; Dankelman, J.	Workflow mining and outlier detection from clinical activity logs
2012	J	J. of Computational Information Systems (JCIS)	Chen, L.; Li, X.; Yang, Q.	Continuous process improvement based on adaptive workflow mining technique
2012	J	J. of Computational Information Systems (JCIS)	Hu, H.; Hu, H.; Chiu, D. K. W.	A framework for service-based business process collaboration
2012	J	J. of Computational Information Systems (JCIS)	Liu, H.; Liu, G.; Zhao, D.; Song, J.	A clustering approach for artifact-centric business process models
2012	J	J. of Convergence Information Technology (JCIT)	Li, M.	Case mining in knowledge maintenance
2012	J	J. of Computers (JCP)	Kuo, M.-H.; Chen, Y.-S.	A method to identify the difference between two process models
2012	J	J. of Intelligent Information Systems (JIIS)	Leifler, O.; Eriksson, H.	Message classification as a basis for studying command and control communications – An evaluation of machine learning approaches
2012	J	Information Systems (JIS)	Awad, A.; Gore, R.; Hou, Z.; Thomson, J.; Weidlich, M.	An iterative approach to synthesize business process templates from compliance rules
2012	J	Information Systems (JIS)	Bose, R. P. J. C.; van der Aalst, W. M. P.	Process diagnostics using trace alignment: Opportunities, issues, and challenges
2012	J	Information Systems (JIS)	Fahland, D.; van der Aalst, W. M. P.	Simplifying discovered process models in a controlled manner
2012	J	Information Systems (JIS)	Rebuge, A.; Ferreira, D. R.	Business process analysis in healthcare environments: A methodology based on process mining
2012	J	Information Systems (JIS)	Stuit, M.; Wortmann, H.	Discovery and analysis of e-mail-driven business processes

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2012	J	Information Systems (JIS)	Weerdt, J.; Backer, M.; Vanthienen, J.; Baessens, B.	A multi-dimensional quality assessment of state-of-the-art process discovery algorithms using real-life event logs
2012	J	Personal and Ubiquitous Computing (JPUC)	Chen, J.; Zhou, X.; Jin, Q.	Recommendation of optimized information seeking process based on the similarity of user access behavior patterns
2012	J	J. of Systems and Software (JSS)	Castillo, R. P.; Lemus, J. A. C.; Guzman, I. G.-R.; Piattoni, M.	A family of case studies on business process mining using MARBLE
2012	J	Knowledge-Based Systems (KBS)	Liu, T.; Cheng, Y.; Ni, Z.	Mining event logs to support workflow resource allocation
2012	J	Knowledge Management and E-Learning (KM&EL)	Kim, K. P.	Mining workflow processes from distributed workflow enactment event logs
2012	J	Program (PROGRAM)	Soylu, A.; Modritscher, F.; Wild, F.; Causmaecker, P.; Desmet, P.	Mashups by orchestration and widget-based personal environments: Key challenges, solution strategies, and an application
2012	J	IEEE Trans. on Systems, Man, and Cybernetics (SMC)	Allen, L. V.; Tilbury, D. M.	Anomaly detection using model generation for event-based systems without a preexisting formal model
2012	J	IEEE Trans. on Systems, Man, and Cybernetics (SMC)	Weber, P.; Bordbar, B.; Tino, P.	A Framework for the Analysis of Process Mining Algorithms
2012	J	Software and Systems Modeling (SoSyM)	Castillo, R. P.; Weber, B.; Guzman, I. G.-R.; Piattoni, M.; Pinggera, J.	Assessing event correlation in non-process-aware information systems
2012	J	WIT Trans. on the Built Environment (WIT TBE)	Kecman, P.; Goverde, R. M. P.	Process mining of train describer event data and automatic conflict identification
2013	C	Asia-Pacific Conf. on Business Process Management (AP-BPM)	Lee, D.; Park, J.; Pulshashi, I. R.; Bae, H.	Clustering and Operation Analysis for Assembly Blocks Using Process Mining in Shipbuilding Industry
2013	C	Asia-Pacific Conf. on Business Process Management (AP-BPM)	Obregon, J.; Kim, A.; Jung, J.-Y.	DTMiner: A Tool for Decision Making Based on Historical Process Data
2013	C	Asia-Pacific Conf. on Business Process Management (AP-BPM)	Yahya, B. N.; Bae, H.; Sul, S.-ook; Wu, J.-Zheng	Process Discovery by Synthesizing Activity Proximity and User's Domain Knowledge
2013	C	IEEE Int. Cong. on Big Data (BigData)	Azzini, A.; Ceravolo, P.	Consistent process mining over big data triple stores
2013	C	Int. WS on Business Process Intelligence (BPI)	Esposito, P. M.; Vaz, M. A. A.; Rodrigues, S. A.; Souza, J. M.	MANA: Identifying and mining unstructured business processes
2013	C	Int. WS on Business Process Intelligence (BPI)	Ferreira, D. R.; Szimanski, F.; Ralha, C. G.	A hierarchical Markov model to understand the behaviour of agents in business processes
2013	C	Int. WS on Business Process Intelligence (BPI)	Goel, S.; Bhat, J. M.; Weber, B.	End-to-end process extraction in process unaware systems
2013	C	Int. WS on Business Process Intelligence (BPI)	Pika, A.; van der Aalst, W. M. P.; Fidge, C. J.; ter Hofstede, A. H. M.; Wynn, M. T.	Predicting deadline transgressions using event logs
2013	C	Int. WS on Business Process Intelligence (BPI)	Suriadi, S.; Ouyang, C.; van der Aalst, W. M. P.; ter Hofstede, A. H. M.	Root cause analysis with enriched process logs
2013	C	Int. Conf. on Business Process Management (BPM)	Adriansyah, A.; Gama, J. M.; Carmona, J.; van Dongen, B. F.; van der Aalst, W. M. P.	Alignment based precision checking

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2013	C	Int. Conf. on Business Process Management (BPM)	Baier, T.; Mendling, J.	Bridging abstraction layers in process mining by automated matching of events and activities
2013	C	Int. Conf. on Business Process Management (BPM)	Bose, R. P. J. C.; Maggi, F. M.; van der Aalst, W. M. P.	Enhancing declare maps based on event correlations
2013	C	Int. Conf. on Business Process Management (BPM)	Buijs, J. C. A. M.; van Dongen, B. F.; van der Aalst, W. M. P.	Mining configurable process models from collections of event logs
2013	C	Int. Conf. on Business Process Management (BPM)	Gama, J. M.; Carmona, J.; van der Aalst, W. M. P.	Conformance checking in the large: Partitioning and topology
2013	C	Int. Conf. on Business Process Management (BPM)	Nooijen, E. H. J.; van Dongen, B. F.; Fahland, D.	Automatic discovery of data-centric and artifact-centric processes
2013	C	Int. Conf. on Business Process Management (BPM)	Poggi, N.; Muthusamy, V.; Carrera, D.; Khalaf, R.	Business process mining from e-commerce web logs
2013	C	Int. Conf. on Business Process Management (BPM)	Popova, V.; Dumas, M.	From petri nets to Guard-Stage-Milestone models
2013	C	Int. Conf. on Business Process Management (BPM)	Verbeek, H. M. W.; van der Aalst, W. M. P.	An experimental evaluation of passage-based process discovery
2013	C	Int. WS on Business Process Modeling, Development and Support (BPMDS)	Baier, T.; Mendling, J.	Bridging abstraction layers in process mining: Event to activity mapping
2013	C	Int. WS on Business Process Modeling, Development and Support (BPMDS)	Outmagzin, N.; Soffer, P.	Business process workarounds: What can and cannot be detected by process mining
2013	C	Int. WS on Business Process Modeling, Development and Support (BPMDS)	Szimanski, F.; Ralha, C. G.; Wagner, G.; Ferreira, D. R.	Improving business process models with agent-based simulation and process mining
2013	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Maggi, F. M.; Bose, R. P. J. C.; van der Aalst, W. M. P.	A knowledge-based integrated approach for discovering and re-pairing declare maps
2013	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Pika, A.; van der Aalst, W. M. P.; Fidge, C. J.; ter Hofstede, A. H. M.; Wynn, M. T.	Profiling event logs to configure risk indicators for process delays
2013	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Suriadi, S.; Wynn, M. T.; Ouyang, C.; ter Hofstede, A. H. M.; van Dijk, N. J.	Understanding process behaviours in a large insurance company in Australia: A case study
2013	C	IEEE Int. Conf. on Business Informatics (CBI)	Vasilyev, E.; Ferreira, D. R.; Iijima, J.	Using inductive reasoning to find the cause of process delays
2013	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	Bose, R. P. J. C.; van der Aalst, W. M. P.	Discovering signature patterns from event logs
2013	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	Burattin, A.; Sperduti, A.; Veluscek, M.	Business models enhancement through discovery of roles
2013	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	di Ciccio, C.; Mecella, M.	A two-step fast algorithm for the automated discovery of declarative workflows
2013	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	vanden Broucke, S. K. L. M.; de Weerdt, J.; Vanthienen, J.; Baesens, B.	A comprehensive benchmarking framework (CoBeTra) for performance analysis between procedural process models and event logs in ProM

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2013	C	IEEE Symp. on Computational Intelligence and Data Mining (CIDM)	Weber, P.; Bordbar, B.; Tino, P.	A principled approach to mining from noisy logs using Heuristics Miner
2013	C	IEEE Int. Conf. on Collaborative Computing: Networking, Applications and Worksharing (COLLABORATECOM)	Schonig, S.; Zeising, M.; Jablonski, S.	Supporting collaborative work by learning process models and patterns from cases
2013	C	Int. IFIP TC8 WG 8.9 Conf. on Research and Practical Issues in Enterprise Information Systems (CONFENIS)	Herrera, B. Y.; Castro, R. S.; Lazo-Cortes, M.	Sub-process discovery: Opportunities for process diagnostics
2013	C	Int. Conf. on Control Systems and Computer Science (CSCS)	Chinches, D.; Salomie, I.	Process discovery using ant colony optimization
2013	C	Int. Conf. on Collaboration Technologies and Systems (CTS)	Diamantini, C.; Genga, L.; Potena, D.; Storti, E.	Pattern discovery from innovation processes
2013	C	Int. Conf. on Design Science at the Intersection of Physical and Virtual Design (DESRIST)	Wickop, N. M.; Schultz, M.	ERP event log preprocessing: Timestamps vs. accounting logic
2013	C	WS on Data Mining for Healthcare Management (DMHM)	Weerdt, J.; Caron, F.; Vanthienen, J.; Baessens, B.	Getting a grasp on clinical pathway data: An approach based on process mining
2013	C	Data Mining for Service WS (DMS)	Peters, E. M. L.; Dedene, G.; Poelmans, J.	Understanding service quality and customer churn by process discovery for a multi-national banking contact center
2013	C	Eur. Conf. on Information Systems (ECIS)	Breuker, D.; Matzner, M.	Statistical sequence analysis for business process mining and organizational routines
2013	C	Int. Conf. on Electronic Commerce and Web Technologies (EC-Web)	Shen, M.; Liu, D.-R.	Discovering workflow-aware virtual knowledge flows for knowledge dissemination
2013	C	IEEE Int. Enterprise Distributed Object Computing Conf. (EDOC)	Caron, F.; Vanthienen, J.; Baesens, B.	Business rule patterns and their application to process analytics
2013	C	IEEE Int. Enterprise Distributed Object Computing Conf. (EDOC)	Herzberg, N.; Meyer, A.; Weske, M.	An event processing platform for business process management
2013	C	IEEE Int. Enterprise Distributed Object Computing Conf. (EDOC)	Yano, K.; Nomura, Y.; Kanai, T.	A practical approach to automated business process discovery
2013	C	Int. IEEE WS on Experimental Economics and Machine Learning (EEML)	Peters, E. M. L.; Dedene, G.; Poelmans, J.	Empirical discovery of potential value leaks in processes by means of formal concept analysis
2013	C	Portuguese Conf. on Artificial Intelligence (EPIA)	Pina, S. M.; Antunes, C.	(TD)2PAM: A constraint-based algorithm for mining temporal patterns in transactional databases
2013	C	Int. Conf. on Conceptual Modeling (ER)	Werner, M.	Colored Petri nets for integrating the data perspective in process audits
2013	C	Int. Conf. on Computer Aided Systems Theory (EUROCAST)	Dunkl, R.	Data improvement to enable process mining on integrated non-log data sources
2013	C	Int. Conf. on Fundamental Approaches to Software Engineering (FASE)	Leoni, M.; Dumas, M.; Banuelos, L. G.	Discovering branching conditions from business process execution logs

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2013	C	Federated Conf. on Computer Science and Information Systems (FedCIS)	van der Aalst, W. M. P.	A general divide and conquer approach for process mining
2013	C	Int. Conf. on Computer, Control, Informatics and Its Applications (IC3INA)	Sarno, R.; Sari, P. L. I.; Ginardi, H.; Sunaryono, D.; Mukhlash, I.	Decision mining for multi choice workflow patterns
2013	C	Int. Joint Conf. on Knowledge Discovery, Knowledge Engineering and Knowledge Management (IC3K)	Ramos, E. C.; Santoro, F. M.; Baiao, F. A.	Thinking Out of the Box: Discovering the Relevance of External Context to Business Processes
2013	C	Int. Conf. on Computing, Communications and Networking Technologies (ICCCNT)	Panchal, P. S.	Hybrid technique for user's web page access prediction based on Markov model
2013	C	Int. Carnahan Conf. on Security Technology (ICCST)	Talamo, M.; Arcieri, F.; Schunck, C. H.; D'Iddio, A. C.	Conformance checking of electronic business processes to secure distributed transactions
2013	C	IEEE Int. Conf. on e-Business Engineering (ICEBE)	do Nascimento, G. S.; Iochpe, C.; Thorn, L.; Kalsing, A. C.	Discovering business processes in legacy systems using business rules and log mining
2013	C	Int. Conf. on Enterprise Information Systems (ICEIS)	Kalsing, A. C.; Iochpe, C.; Thom, L. H.; do Nascimento, G. S.	Evolutionary learning of business process models from legacy systems using incremental process mining
2013	C	Int. Conf. on Informatics and Applications (ICIA)	Seleem, Y. Z.; Mohamed, M. H.; Hussain, K. F.	Improving genetic process mining using Honey Bee algorithm
2013	C	Int. Conf. on Information Science and Applications (ICISA)	Kim, S.; Lee, K.	Design of the integrated monitoring framework based on ontology for analyzing the customer feedback
2013	C	Int. Conf. on ICT and Knowledge Engineering (ICT&KE)	Porouhan, P.; Jongsawat, N.; Premchaiswadi, W.	Workflow mining: Discovering process patterns & data analysis from XML logs
2013	C	IEEE Int. Conf. on Web Services (ICWS)	Liu, X.; Liu, H.; Ding, C.	Incorporating user behavior patterns to discover workflow models from event logs
2013	C	Int. Conf. on information Engineering and Applications (IEA)	Duan, J.; Liu, S.	Research on web log mining
2013	C	Int. Conf. on Industrial, Engineering and Other Applications of Applied Intelligent Systems (IEA/AIE)	Ferilli, S.; Carolis, B.; Redavid, D.	Logic-based incremental process mining in smart environments
2013	C	Int. Joint Conf. on Computational Intelligence (IJCCI)	Przybylak, M. R.	Skeletal Algorithms in Process Mining
2013	C	Int. Conf. on Intelligent Systems Design and Applications (ISDA)	Naseri, M.; Ludwig, S. A.	Extracting workflow structures through Bayesian learning and provenance data
2013	C	ACM SIGSPATIAL Int. WS on MapInteraction (MapInteract)	Arteaga, M. G.	Historical map polygon and feature extractor
2013	C	IFIP Int. Conf. on Digital Product and Process Development Systems (NEW PROLAMAT)	Chirici, L.; Wang, K.	A 'Lean' Fuzzy Rule to Speed-Up a Taylor-Made Warehouse Management Process
2013	C	Int. WS on New Frontiers in Mining Complex Patterns (NFMCP)	Folini, F.; Guarascio, M.; Pontieri, L.	Context-aware predictions on business processes: An ensemble-based solution

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2013	C	Pacific-Asia Conf. on Advances in Knowledge Discovery and Data Mining (PAKDD)	Yang, H.; Wen, L.; Wang, J.	An approach to identifying false traces in process event logs
2013	C	Int. Conf. on Application and Theory of Petri Nets and Concurrency (Petri Nets)	Gama, J. M.; Carmona, J.; van der Aalst, W. M. P.	Hierarchical conformance checking of process models based on event logs
2013	C	Int. Conf. on Research Challenges in Information Science (RCIS)	Khodabandehou, G.; Hug, C.; Deneckere, R.; Salinesi, C.	Supervised intentional process models discovery using Hidden Markov models
2013	C	ACM Symp. on Applied Computing (SAC)	Leoni, M.; van der Aalst, W. M. P.	Data-aware process mining: Discovering decisions in processes using alignments
2013	C	ACM Symp. on Applied Computing (SAC)	Wombacher, A.; Lacob, M.-E.	Start time and duration distribution estimation in semi-structured processes
2013	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	Aguirre, S.; Parra, C.; Alvarado, J.	Combination of Process Mining and Simulation Techniques for Business Process Redesign: A Methodological Approach
2013	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	Azzini, A.; Braghin, C.; Damiani, E.; Zavarelli, F.	Using semantic lifting for improving process mining: A data loss prevention system case study
2013	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	di Ciccio, C.; Mecella, M.	Studies on the discovery of declarative control flows from error-prone data
2013	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	van der Spoel, S.; van, Keulen, M.; Amrit, C.	Process Prediction in Noisy Data Sets: A Case Study in a Dutch Hospital
2013	C	Int. Conf. on Intelligent Systems: Theories and Applications (STTA)	Souhalil, B.; Kabbaj, M. I.; Bakkoury, Z.	Process mining: Matrix representation for bloc discovery
2013	C	Int. Conf. on Signal-Image Technology and Internet-Based Systems (STIS)	Esgin, E.; Karagoz, P.	Confidence-aware sequence alignment for process diagnostics
2013	C	Int. Conf. on Signal-Image Technology and Internet-Based Systems (STIS)	Kudo, M.; Ishida, A.; Sato, N.	Business process discovery by using process skeletonization
2013	C	ACIS Int. Conf. on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD)	Atahary, T.; Taha, T. M.; Douglass, S.	Hardware accelerated cognitively enhanced complex event processing architecture
2013	C	Int. Conf. on Soft Computing Models in Industrial and Environmental Applications (SOCO)	Sperka, R.; Spisak, M.; Shalinova, K.; Martinovic, J.; Drzadlova, P.	Control loop model of virtual company in BPM simulation
2013	C	Int. WS on Security and trust management (STM)	Koslowski, T.; Zimmermann, C.	Towards a Detective Approach to Business Process-Centred Resilience
2013	C	WS on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE)	Triki, S.; Saoud, N. B. B.; Dugdale, J.; Hanachi, C.; Dey, L.; Bharadwaja, H. S.; Meera, G.; Shroff, G.	Coupling case based reasoning and process mining for a web-based crisis management decision support system
2013	C	IEEE/WIC/ACM Int. Conf. on Web Intelligence (WI)	Liu, X.; Fang, X.; Wang, M.; Yin, Z.	Email analytics for activity management and insight discovery
2013	J	Applied Mathematics and Information Sciences (AMIS)	Paralic, J.; Babic, F.; Paralic, M.	The behavior trustworthiness analysis methods of composite web services based on process mining
2013	J	Acta Polytechnica Hungarica (APH)	Paralic, J.; Babic, F.; Paralic, M.	Process-driven approaches to knowledge transformation

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2013	J	Business Process Management J. (BPMJ)	Jareevongpiboon, W.; Janecek, P.	Ontological approach to enhance results of business process mining and analysis
2013	J	Concurrency Computation Practice and Experience (CCPE)	Wen, Y.; Chen, Z.; Liu, J.; Chen, J.	Mining batch processing workflow models from event logs
2013	J	Computers in Industry (CI)	Caron, F.; Vanthienen, J.; Baesens, B.	A comprehensive investigation of the applicability of process mining techniques for enterprise risk management
2013	J	Computers in Industry (CI)	Weerdt, J.; Schupp, A.; Vanderloock, A.; Baesens, B.	Process Mining for the multi-faceted analysis of business processes – A case study in a financial services organization
2013	J	Cutter IT J. (CIT.J)	Astromskis, S.; Janes, A.; Sillitti, A.; Succi, G.	Implementing organization-wide gembu using noninvasive process mining
2013	J	Computer Science – Research and Development (CSR.D)	Radeschutz, S.; Schwarz, H.; Niedermann, F.	Business impact analysis-a framework for a comprehensive analysis and optimization of business processes
2013	J	Database (DB)	Li, C.; Jimeno-Yepes, A.; Arregui, M.; Kirsch, H.; Rebholz-Schuhmann, D.	PCorral – Interactive mining of protein interactions from MEDLINE
2013	J	Distributed and Parallel Databases (DPD)	Zeng, Q.; Sun, S. X.; Duan, H.; Liu, C.; Wang, H.	Decomposing Petri nets for process mining: A generic approach
2013	J	Decision Support Systems (DSS)	Caron, F.; Vanthienen, J.; Baesens, B.	Comprehensive rule-based compliance checking and risk management with process mining
2013	J	Decision Support Systems (DSS)	Foguem, B. K.; Rigal, F.; Mauget, F.	Cross-organizational collaborative workflow mining from a multi-source log
2013	J	Expert Systems with Applications (ESA)	Lee, S.-K.; Kim, B.; Huh, M.; Cho, S.; Park, S.; Lee, D.	Mining association rules for the quality improvement of the production process
2013	J	Expert Systems with Applications (ESA)	Mahmood, T.; Shaikh, G. M.	Mining transportation logs for understanding the after-assembly block manufacturing process in the shipbuilding industry
2013	J	Expert Systems with Applications (ESA)	Song, M.; Yang, H.; Siadat, S. H.; Pechenizkiy, M.	Adaptive Automated Teller Machines
2013	J	Expert Systems with Applications (ESA)	Wang, Y.; Caron, F.; Vanthienen, J.; Huang, L.; Guo, Y.	A comparative study of dimensionality reduction techniques to enhance trace clustering performances
2013	J	Healthcare Informatics Research (HIR)	Kim, E.; Kim, S.; Song, M.; Kim, S.; Yoo, D.; Hwang, H.; Yoo, S.	Acquiring logistics process intelligence: Methodology and an application for a Chinese bulk port
2013	J	Intelligent Data Analysis (IDA)	Schmidt, J.; Ghorbani, A.; Hapfelmeier, A.; Kramer, S.	Discovery of outpatient care process of a tertiary university hospital using process mining
2013	J	Int. J. of Industrial Engineering and Management (IEM)	Tomasevic, I.; Slovic, D.	Learning probabilistic real-time automata from multi-attribute event logs
2013	J	Int. J. of Applied Engineering Research (IJAER)	Pandian, P. S.; Srinivasan, S.	Facilitating wasteful activities discovery in pure service environment through usage of process mining
2013	J	Int. J. of Advanced Manufacturing Technology (IJAMT)	Stockton, D. J.; Khalili, R. A.; Mukhongo, L. M.	Enhanced CFPMA approach for mining frequent patterns in web log data
				Cost model development using virtual manufacturing and data mining: Part II – Comparison of data mining algorithms

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2013	J	Int. J. of Advanced Manufacturing Technology (IJAMT)	Stockton, D. J.; Khalil, R. A.; Mukhongo, M. L.	Cost model development using virtual manufacturing and data mining: Part i – Methodology development
2013	J	Int. J. of Business Process Integration and Management (IJBPM)	Ferreira, D. R.; Szimanski, F.; Ralha, C. G.	Mining the low-level behaviour of agents in high-level business processes
2013	J	Int. J. of Business Process Integration and Management (IJBPM)	Ghanadbashi, S.; Khambabaei, M.; Abadeh, M. S.	Applying data mining techniques to business process reengineering based on simultaneous use of two novel proposed approaches
2013	J	Information Sciences (ISJ)	Huang, H.; Xiao, J.; Yang, Q.; Wang, Q.; Wu, H.	Creating Process-Agents incrementally by mining process asset library
2013	J	J. of Theoretical and Applied Information Technology (JATIT)	Jian, C.; Li, F.	An improved virus evolutionary genetic algorithm for workflow mining
2013	J	J. of Biomedical Informatics (JBI)	Huang, Z.; Lu, X.; Duan, H.; Fan, W.	Summarizing clinical pathways from event logs
2013	J	Information Systems (JIS)	Bezerra, F.; Wainer, J.	Algorithms for anomaly detection of traces in logs of process aware information systems
2013	J	Information Systems (JIS)	Mans, R. S.; Reijers, H. A.; Wismeyer, D.; van Genuchten, M.	A process-oriented methodology for evaluating the impact of IT: A proposal and an application in healthcare
2013	J	J. of Internet Technology (JIT)	Sellami, R.; Gaaloul, W.; Defude, B.	Process socio space discovery based on semantic logs
2013	J	J. of Software (JS)	Guo, Z.; Yu, Y.; Sun, Z.; Lu, Y.	Application development framework for measurement-based product testing management
2013	J	Kubernetes (Kubernetes)	Liu, J.; Liu, P.; Liu, S.; Ma, Y.; Yang, W.	Handover optimization in business processes via prediction
2013	J	IEEE Trans. on Systems, Man, and Cybernetics (SMC)	Aztaria, A.; Augusto, J. C.; Basagoiti, R.; Izaguirre, A.; Cook, D. J.	Learning frequent behaviors of the users in intelligent environments
2013	J	IEEE Trans. on Knowledge and Data Engineering (TKDE)	de Weerd, J.; vanden Broucke, S.; Vanthienen, J.; Baesens, B.	Active trace clustering for improved process discovery
2013	J	IEEE Trans. on Knowledge and Data Engineering (TKDE)	Sol, M.; Carmona, J.	Region-based foldings in process discovery
2013	J	ACM Trans. on Management Information Systems (TMIS)	Zhang, H.; Mehrotra, S.; Liebovitz, D.; Gunter, C. A.; Malin, B.	Mining deviations from patient care pathways via electronic medical record system audits
2013	J	IEEE Trans. on Services Computing (TSC)	van der Aalst, W. M. P.	Service mining: Using process mining to discover, check, and improve service behavior
2013	J	IEEE Trans. on Services Computing (TSC)	Wen, L.; Wong, R. K.; Ding, J.; Guo, Q.; Wang, J.	Efficient selection of process mining algorithms
2013	J	Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery (WIRE DMKD)	Folini, F.; Greco, G.; Guzzo, A.; Pontieri, L.	Methods and techniques for discovering taxonomies of behavioral process models
2014	C	IEEE Conf. Anthology (ANTHOLOGY)	Haung, Z.-C.; Chen, Y.-S.; Chung, Y.-K.	Statistical process monitoring by using process mining
2014	C	Asia-Pacific Conf. on Business Process Management (AP-BPM)	Guo, Q.; Wen, L.; Wang, J.; Ding, Z.; Lv, C.	A universal significant reference model set for process mining evaluation framework
2014	C	IEEE Int. Conf. on Big Data (BigData)	Yang, H.; Park, M.; Cho, M.; Song, M.; Kim, S.	A system architecture for manufacturing process analysis based on big data and process mining techniques

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2014	C	Int. Conf. on Perspectives in Business Informatics Research (BIR)	Jalali, A.	Aspect mining in business process management
2014	C	Int. Conf. on Business Process Management (BPM)	de Leon, M.; van der Aalst, W. M. P.; Dees, M.	A general framework for correlating business process characteristics
2014	C	Int. Conf. on Business Process Management (BPM)	Kim, A.; Obregon, J.; Jung, J.-Y.	Constructing decision trees from process logs for performer recommendation
2014	C	Int. Conf. on Business Process Management (BPM)	Ribeiro, J.; Carmona, J.; Misir, M.; Sebag, M.	A recommender system for process discovery
2014	C	Int. Conf. on Business Process Management (BPM)	Rodriguez, C.; Daniel, F.; Casati, F.	Crowd-based mining of reusable process model patterns
2014	C	Int. Conf. on Business Process Management (BPM)	Seret, A.; vanden Broucke, S. K. L. M.; Baessens, B.; Vanthienen, J.	An exploratory approach for understanding customer behavior processes based on clustering and sequence mining
2014	C	Int. Conf. on Business Process Management (BPM)	Vazquez-Barreiros, B.; Muñientes, M.; Lama, M.	A genetic algorithm for process discovery guided by completeness, precision and simplicity
2014	C	Int. Conf. on Advanced Information Systems Engineering (CAiSE)	Pika, A.; Wynn, M. T.; Fidge, C. J.; ter Hofstede, A. H. M.; Leyer, M.; van der Aalst, W. M. P.	An extensible framework for analysing resource behaviour using event logs
2014	C	IEEE Cong. on Evolutionary Computation (CEC)	Burattin, A.; Sperduti, A.; van der Aalst, W. M. P.	Control-flow discovery from event streams
2014	C	IEEE Cong. on Evolutionary Computation (CEC)	vanden Broucke, S. K. L. M. ; Vanthienen, J.; Baesens, B.	Declarative process discovery with evolutionary computing
2014	C	Int. Conf. on Computer Information Systems and Industrial Management (CISIM)	Stolfa, J.; Stolfa, S.; Slaninova, K.; Martinovic, J.; Snasel, V.	An impact of the user and time parameters to sequence alignment methods for process mining
2014	C	Iberian Conf. on Information Systems and Technologies (CISTI)	Cesar, I.; Ferreira, K.; Batos, V.	Towards a method to retrieving business process model from source code
2014	C	IEEE Int. Conf. on Computer and Information Technology (CIT)	Getta, J. R.; Zimniak, M.; Benn, W.	Mining periodic patterns from nested event logs
2014	C	Int. Conf. on Computer Systems and Technologies (CompSysTech)	Savickas, T.; Vasilecas, O.	Bayesian belief network application in process mining
2014	C	WS on Concurrency, Specification and Programming (CS&P)	Bazan, J. G.; Szpyrka, M.; Szczur, A.; Dydo, L.; Wojtowicz, H.	Classifiers for behavioral patterns identification induced from huge temporal data
2014	C	Int. Conf. on Collaboration Technologies and Systems (CTS)	Diamantini, C.; Genga, L.; Potena, D.; Ribighini, G.	A methodology for building log of collaboration processes
2014	C	IEEE Int. Conf. on Distributed Computing in Sensor Systems (DCOSS)	Despaux, F.; Song, Y.-Q.; Lahmadi, A.	Modelling and performance analysis of wireless sensor networks using process mining techniques: ContikiMAC use case
2014	C	Int. Conf. on Discovery Science (DS)	Ceci, M.; Lanotte, P. F.; Fumarola, F.; Cavallo, D. P.; Malerba, D.	Completion Time and Next Activity Prediction of Processes Using Sequential Pattern Mining
2014	C	Eur. Conf. on Information Systems (ECIS)	Matzner, M.; Scholten, H.	Process mining approaches to detect organizational properties in cyber-physical systems

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2014	C	Int. Symp. on Empirical Software Engineering and Measurement (ESEM)	Rubin, V. A.; Mitsyuk, A. A.; Lomazova, I. A.; van der Aalst, W. M. P.	Process mining can be applied to software too!
2014	C	Int. Conf. on Semantic Web: Trends and Challenges (ESWC)	Kietz, J.-U.; Serban, F.; Fischer, S.; Bernstein, A.	Semantics inside! but let's not tell the data miners: Intelligent support for data mining
2014	C	Hawaii Int. Conf. on System Sciences (HICSS)	Engel, R.; Bose, R. P. J. C.	A case study on analyzing inter-organizational business processes from EDI messages using physical activity mining
2014	C	Hawaii Int. Conf. on System Sciences (HICSS)	Wang, G. A.; Wang, H. J.; Li, J.; Fan, W.	Mining knowledge sharing processes in online discussion forums
2014	C	Hawaii Int. Conf. on System Sciences (HICSS)	Werner, M.; Nuttgens, M.	Improving structure: Logical sequencing of mined process models
2014	C	IEEE Int. Conf. on e-Business Engineering (ICEBE)	Wang, J.; Jiang, L.; Cai, H.	Scenario-based method for business process analysis and improvement in SOA
2014	C	Int. Conf. on Enterprise Information Systems (ICEIS)	Folino, F.; Guarascio, M.; Pontieri, L.	A framework for the discovery of predictive fix-time models
2014	C	Int. Conf. on Enterprise Information Systems (ICEIS)	Kalsing, A. C.; Iochpe, C.; Thom, L. H.; do Nascimento, G. S.	Re-learning of Business Process Models from Legacy System Using Incremental Process Mining
2014	C	Int. Conf. on Future Software Engineering and Multimedia Engineering (ICFME)	Giuseppe, C.; Valerio, M.; Teresa, M.; Carmela, S. L.	A Simulation Approach in Process Mining Conformance Analysis. The Introduction of a Brand New BPMN Element
2014	C	IEEE Int. Conf. on Networking, Sensing and Control (ICNSC)	Zhou, Z.; Wang, Y.; Li, L.	Process mining based modeling and analysis of workflows in clinical care – A case study in a chicago outpatient clinic
2014	C	Int. Conf. on Information and Communication Technology (ICoICT)	Ahmad, T.; Sarno, R.; Santoso, H. A.	Identification of process-based fraud patterns in credit application
2014	C	IEEE Int. Conf. on Semantic Computing (ICSC)	Pospiech, S.; Mielke, S.; Mertens, R.; Pelke, M.; Jagannath, K.; Stadler, M.	Exploration and analysis of undocumented processes using heterogeneous and unstructured business data
2014	C	Int. Conf. on Software Engineering (ICSE)	Mittal, M.; Sureka, A.	Process mining software repositories from student projects in an undergraduate software engineering course
2014	C	Int. Joint Conf. on Neural Networks (IJCNN)	Polato, M.; Sperduti, A.; Burattin, A.; de Leon, M.	Data-aware remaining time prediction of business process instances
2014	C	Int. Symp. on Computers and Communications (ISCC)	Despaux, F.; Song, Y.-Q.; Lahmadi, A.	Towards performance analysis of wireless sensor networks using Process Mining Techniques
2014	C	Int. Conf. on Intelligent Systems Design and Engineering Applications (ISDEA)	Zhao, L.; Liqun, Z.; Fangfang, H.	An algorithm for conformance checking based on statistics
2014	C	India Software Engineering Conf. (ISEC)	Gupta, M.; Sureka, A.	Nirikshan: Mining bug report history for discovering process maps, inefficiencies and inconsistencies
2014	C	Int. Conf. on Knowledge-Based and Intelligent Information and Engineering Systems (KES)	Relich, M.; Muszynski, W.	The use of intelligent systems for planning and scheduling of product development projects
2014	C	Int. Conf. on Materials Science and Information Technology (MSIT)	Huang, F. F.; Zhang, L. Q.; Li, Z.	Time prediction based on process mining taking concept drift into consideration

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2014	C	Int. Conf. on Networks and Communications (NetCom)	Paulraj, P.; Neelamegam, A.	Improving business intelligence based on frequent itemsets using k-means clustering algorithm
2014	C	Int. Conf. on Research Challenges in Information Science (RCIS)	Khodabandou, G.; Hug, C.; Salinesi, C.	A novel approach to process mining: Intentional process discovery
2014	C	ACM Symp. on Applied Computing (SAC)	Molka, T.; Redlich, D.; Drobek, M.; Caetano, A.; Zeng, X.-J.; Gilani, W.	Conformance checking for BPMN-based process models
2014	C	IEEE Int. Symp. on Applied Computational Intelligence and Informatics (SACI)	Sebu, M. L.; Ciocarlie, H.	Applied process mining in software development
2014	C	ACM Int. Conf. on Management of Data (SIGMOD)	Zhu, X.; Song, S.; Lian, X.; Wang, J.; Zou, L.	Matching heterogeneous event data
2014	C	Symp. on Information Management and Big Data (SIMBig)	de la Vega, K. G. P.; Castanon, C. B.	Discovery of sequential patterns with quantity factors
2014	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	Hompes, B. F. A.; Verbeek, H. M. W.; van der Aalst, W. M. P.	Finding suitable activity clusters for decomposed process discovery
2014	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	Leemans, M.; van der Aalst, W. M. P.	Discovery of frequent episodes in event logs
2014	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	Redlich, D.; Molka, T.; Gilani, W.; Blair, G.; Rashid, A.	Scalable dynamic business process discovery with the constructs competition miner
2014	C	Int. Symp. on Data-Driven Process Discovery and Analysis (SIMPDA)	Siccardi, S.; Sebastiani, C.	Business process measurement in small enterprises after the installation of an ERP software
2014	J	Artificial Intelligence in Medicine (AIM)	Montani, S.; Leonardi, G.; Quaglini, S.; Cavallini, A.; Miceli, G.	Improving structural medical process comparison by exploiting domain knowledge and mined information
2014	J	Advanced Materials Research (AMR)	Li, H.; Ye, X. H.; Yao, S. W.; Yang, J.	Extending the ?-algorithm to mine repetitive task based on complex structure
2014	J	Advanced Materials Research (AMR)	Liao, Y.-X.; Loures, E. R.; Santos, E. A. P.; Canciglieri, O.	The proposition of a framework for semantic process mining
2014	J	Computers in Biology and Medicine (CBM)	Caron, F.; Vanthienen, J.; Vanhaecht, K.; Timmergen, E. V.; de Weerdt, J.; Baesens, B.	Monitoring care processes in the gynecologic oncology department
2014	J	Computers in Human Behavior (CHB)	Sedrakyan, G.; Snoeck, M.; de Weerdt, J.	Process mining analysis of conceptual modeling behavior of novices – Empirical study using JMermaid modeling and experimental logging environment
2014	J	Computers and Industrial Engineering (CIE)	Sutrisnowati, R. A.; Bae, H.; Song, M.	Bayesian network construction from event log for lateness analysis in port logistics
2014	J	Decision Support Systems (DSS)	Ghattas, J.; Soffer, P.; Peleg, M.	Improving business process decision making based on past experience
2014	J	Expert Systems with Applications (ESA)	Alpar, P.; Winkelstraeter, S.	Assessment of data quality in accounting data with association rules
2014	J	Expert Systems with Applications (ESA)	Borrego, D.; Barba, I.	Conformance checking and diagnosis for declarative business process models in data-aware scenarios

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2014	J	Expert Systems with Applications (ESA)	Claes, J.; Poels, G.	Merging event logs for process mining: A rule based merging method and rule suggestion algorithm
2014	J	Expert Systems with Applications (ESA)	de Cruijde, S.; Claes, J.; Poels, G.	Improving the quality of the Heuristics Miner in ProM 6.2
2014	J	Expert Systems with Applications (ESA)	Huang, S.-Y.; Tsaih, R.-H.; Yu, F.	Topological pattern discovery and feature extraction for fraudulent financial reporting
2014	J	Int. J. of Electronic Security and Digital Forensics (ESDF)	Ruiz, M. D.; Martin-Bautista, M. J.; Sanchez, D.; Vila, M.-A.; Delgado, M.	Anomaly detection using fuzzy association rules
2014	J	Frontiers in Artificial Intelligence and Applications (FAIA)	Vasilecas, O.; Kalibatene, D.; Savickas, T.; Smaizys, A.; Trinkunas, J.; Lebedys, E.	Decision-making in information systems based on new development framework and business process mining
2014	J	Fundamenta Informaticae (FI)	Kalenkova, A. A.; Lomazova, I. A.	Discovery of cancellation regions within process mining techniques
2014	J	Fundamenta Informaticae (FI)	van der Aalst, W. M. P.; Verbeek, H. M. W.	Process discovery and conformance checking using passages
2014	J	Health Information Management J. (HIM)	Caron, F.; Vanthienen, J.; Vanhaecht, K.; van Limbergen, E.; Deweerdt, J.; Baesens, B.	A process mining-based investigation of adverse events in care processes
2014	J	ICIC Express Letters (ICIC-EL)	Park, J.; Lee, D.; Bae, H.	Event-log-data-based method for efficiency evaluation of block assembly processes in shipbuilding industry
2014	J	Informs J. on Computing (IJOC)	Xu, K.; Liao, S. S.; Lau, R. Y. K.; Zhao, J. L.	Effective Active Learning Strategies for the Use of Large-Margin Classifiers in Semantic Annotation: An Optimal Parameter Discovery Perspective
2014	J	Int. J. of Production Economics (IJPE)	Park, J.; Lee, D.; Zhu, J.	An integrated approach for ship block manufacturing process performance evaluation: Case from a Korean shipbuilding company
2014	J	Int. J. of Production Research (IJPR)	Lee, C. K. H.; Ho, G. T. S.; Choy, K. L.; Pang, G. K. H.	A RFID-based recursive process mining system for quality assurance in the garment industry
2014	J	Int. J. of Software Engineering and Knowledge Engineering (IJSEKE)	Chang, T.-P.	A Sliding-Window Method to Discover Recent Frequent Query Patterns from XML Query Streams
2014	J	Indian J. of Science and Technology (INDJST)	Grace, L. K. J.; Maheswari, V.	Efficiency calculation of mined web navigational patterns
2014	J	Information Systems and e-Business Management (ISeBM)	Adriansyah, A.; Munoz-Gama, J.; Carmona, J.; van Dongen, B. F.; van der Aalst, W. M. P.	Measuring precision of modeled behavior
2014	J	Information Systems Frontiers (ISF)	Becker, J.; Delfmann, P.; Dietrich, H.-A.; Steinhorst, M.; Eggert, M.	Business process compliance checking applying and evaluating a generic pattern matching approach for conceptual models in the financial sector
2014	J	Int. J. of Information System Modeling and Design (ISMID)	Deneckere, R.; Hug, C.; Khodabandeh, G.; Salinesi, C.	Intentional process mining: Discovering and modeling the goals behind processes using supervised learning
2014	J	Applied Intelligence (JAI)	Khezerlou, A. V.; Alizadeh, S.	A new model for discovering process trees from event logs
2014	J	J. of Theoretical and Applied Information Technology (JATIT)	Gowri, S.; Mala, G. S. A.; Divya, G.	Enhancing the digital data retrieval system using novel techniques
2014	J	J. of Computer Science (JCS)	Sahlabadi, M.; Muniyandi, R. C.; Shukur, Z.	Detecting abnormal behavior in social network websites by using a process mining technique

<sup>a</sup> Legend: C – Conference; J – Journal*Continued on next page*

Table A1 : Complete list of studies (*continued from previous page*)

Year	Type <sup>a</sup>	Source title	Author(s)	Paper title
2014	J	J. of Healthcare Engineering (JHE)	Lanzola, G.; Parimbelli, E.; Micieli, G.; Cavallini, A.; Quaglini, S.	Data Quality and Completeness in a Web Stroke Registry as the Basis for Data and Process Mining
2014	J	J. of Intelligent Information Systems (JIIS)	Ferreira, D. R.; Szimanski, F.; Ralha, C. G.	Improving process models by mining mappings of low-level events to high-level activities
2014	J	Information Systems (JIS)	Baier, T.; Mendling, J.; Weske, M.	Bridging abstraction layers in process mining
2014	J	Information Systems (JIS)	Fahland, D.; van der Aalst, W. M. P.	Model repair – aligning process models to reality
2014	J	Information Systems (JIS)	Garcia-Banuelos, L.; Dumas, M.; la Rosa, M.; de Weerdt, J.; Ekanayake, C. C.	Controlled automated discovery of collections of business process models
2014	J	Information Systems (JIS)	Munoz-Gama, J.; Carmona, J.; van der Aalst, W. M. P.	Single-Entry Single-Exit decomposed conformance checking
2014	J	Knowledge-Based Systems (KBS)	Karray, M.-H.; Chebel-Morello, B.; Zerhouni, N.	PETRA: Process Evolution using a TRAcE-based system on a maintenance platform
2014	J	Knowledge-Based Systems (KBS)	Shafiq, O.; Alhajj, R.; Rokne, J.	Log based business process engineering using fuzzy web service discovery
2014	J	Procedia Computer Science (PCS)	Khodryev, I.; Popova, S.	Discrete modeling and simulation of business processes using event logs
2014	J	Software and Systems Modeling (SoSyM)	de Leoni, M.; Suriadi, S.; ter Hofstede, A. H. M.; van der Aalst, W. M. P.	Turning event logs into process movies: animating what has really happened
2014	J	Software and Systems Modeling (SoSyM)	Outmarzgin, N.; Soffer, P.	A process mining-based analysis of business process workarounds
2014	J	SCIENTIFIC WORLD J. (SWJ)	Khairudin, N. M.; Mustapha, A.; Ahmad, M. H.	Effect of Temporal Relationships in Associative Rule Mining for Web Log Data
2014	J	SCIENTIFIC WORLD J. (SWJ)	Zhao, W.; Liu, X.; Dai, W.	Simplified Process Model Discovery Based on Role-Oriented Genetic Mining
2014	J	IEEE Trans. on Industrial Informatics (TII)	Li, Y.; Cao, B.; Xu, L.; Yin, J.; Deng, S.; Yin, Y.; Wu, Z.	An efficient recommendation method for improving business process modeling
2014	J	IEEE Trans. on Knowledge and Data Engineering (TKDE)	Aggarwal, C. C.; Zhao, Y.; Yu, P. S.	On the use of side information for mining text data
2014	J	IEEE Trans. on Knowledge and Data Engineering (TKDE)	vanden Broecke, S. K. L. M.; de Weerdt, J.; Vanthienen, J.; Baesens, B.	Determining process model precision and generalization with weighted artificial negative events
2014	J	ACM Trans. on Management Information Systems (TMIS)	Wang, G. A.; Wang, H. J.; Li, J.; Abrahams, A. S.; Fan, W.	An analytical framework for understanding knowledge-sharing processes in online Q&A communities
2014	J	IEEE Trans. on Neural Networks and Learning Systems (TNNLS)	Bose, R. P. J. C.; van der Aalst, W. M. P.; Zliobaite, I.; Pechenizkiy, M.	Dealing with concept drifts in process mining
2014	J	J. of Universal Computer Science (UCS)	Wynn, M. T.; Low, W. Z.; Nauta, W.	A framework for cost-aware process management: Cost reporting and cost prediction